MONTGOMERY COUNTY COUNTYSTAT

21 DEC 2016 - PIO

MC311 ANNUAL REVIEW—FY16

Agenda and Meeting Goals

CountyStat
Performance Measurement and Management

1. MC311 Performance Measures and Call Center Utilization

Goal: Monitor and assess MC311 utilization, operations, and customer service

2. Departmental SR, Web, and SLA Performance Trend Analysis

Goal: Monitor and assess performance and utilization trends by department for actionable insights

3. Department Deep-dives

Goal: Examine trends for high priority departments and service areas to define CY17 improvement roadmap

4. CY17 Business Priorities

Goal: Reach consensus on CY17 CountyStat-MC311 priorities and strategy

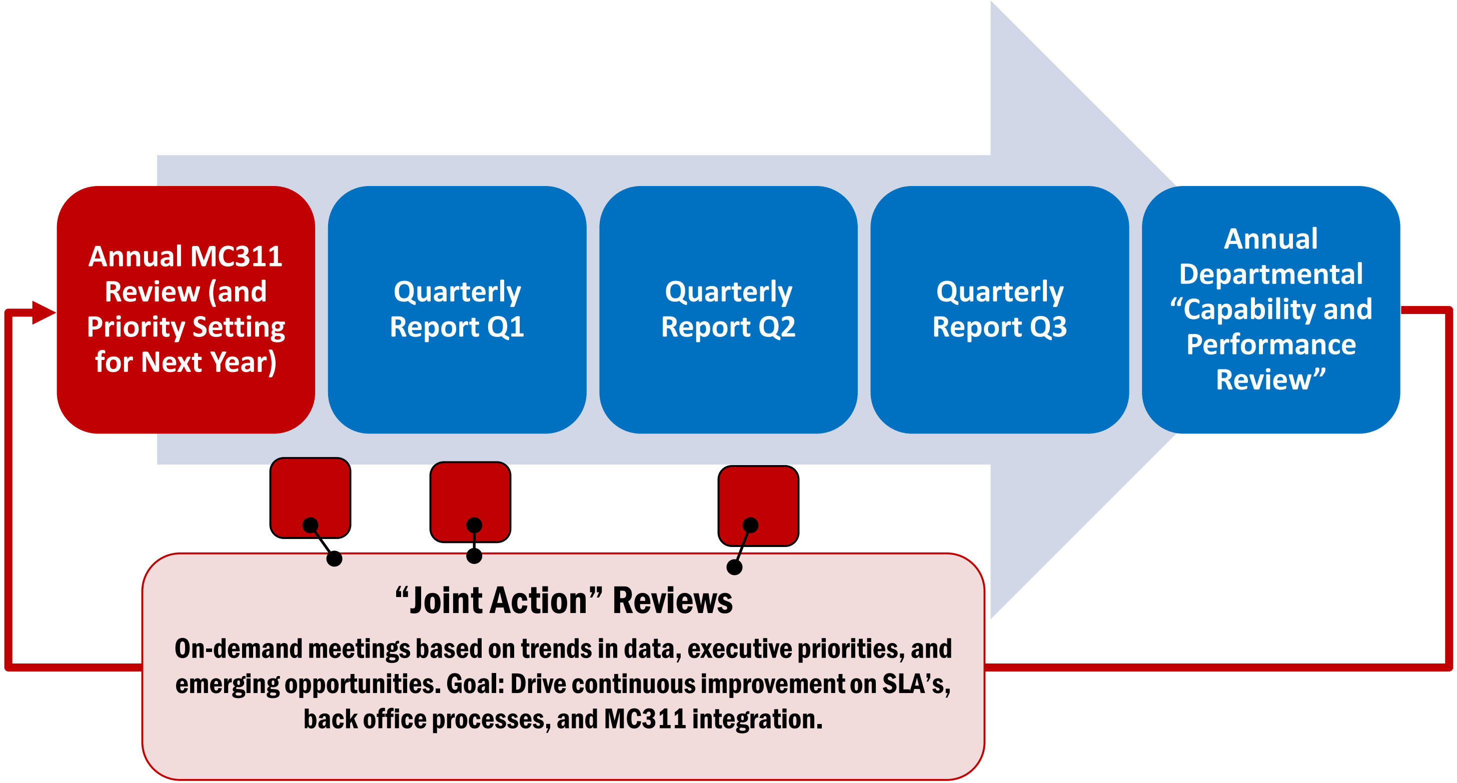
How we will measure success:

- Attainment of Customer Service Center performance goals
- Evidence of continued improvement in SLA completion and responsiveness across departments
- Positive internal and external customer feedback based upon survey results

Definitions: Service Requests

- **GI** = General Information service request answered in call center
- **SR-Fulfillment** = Service request collected by call center (or via the web) and fulfilled by a department
- **SLA** = Service Level Agreement, the number of business days in which a department will fulfill a particular SR

CountyStat 311 Activities



Annual MC311 Review (and Priority Setting for Next Year)

Quarterly Report Q1

Quarterly Report Q2

Quarterly Report Q3

Annual Departmental "Capability and Performance Review"

"Joint Action" Reviews

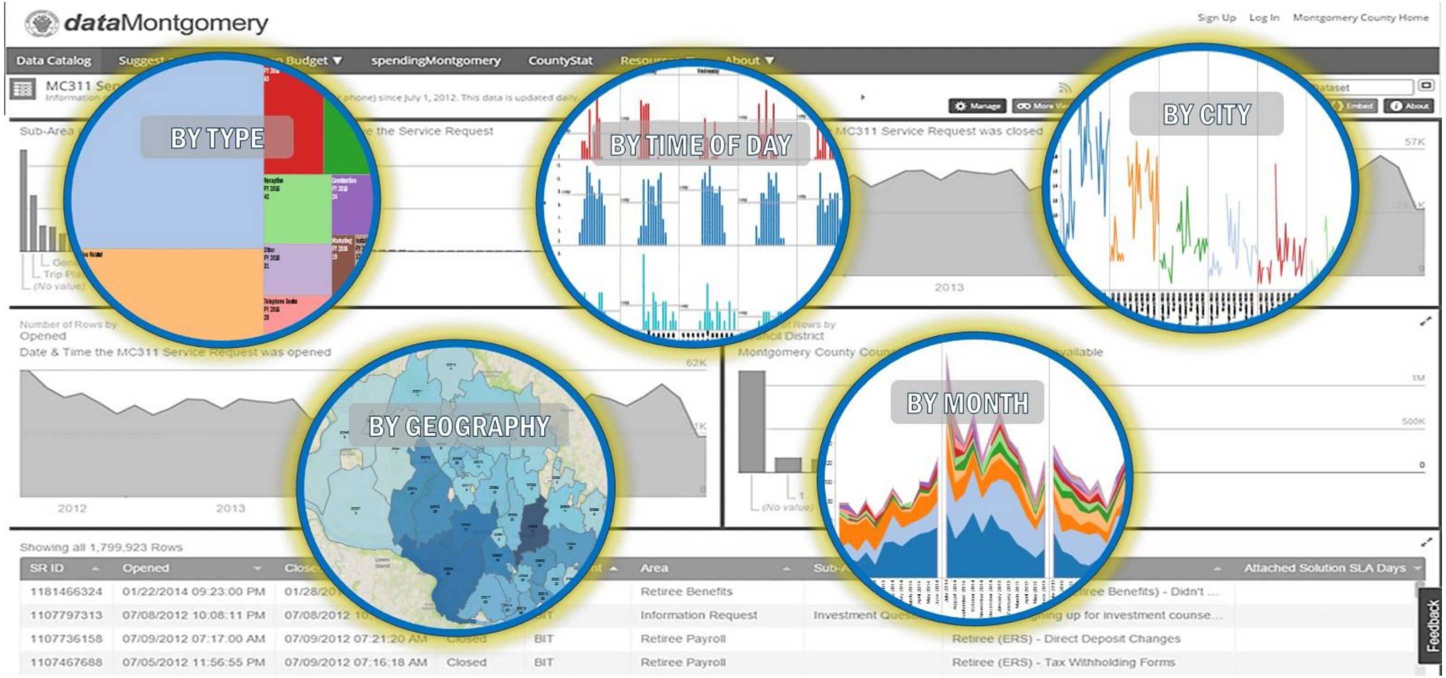
On-demand meetings based on trends in data, executive priorities, and emerging opportunities. Goal: Drive continuous improvement on SLA's, back office processes, and MC311 integration.

In CY16, the Joint Action Reviews were centered on DOT Highway Services, particularly Road Repair and Pothole Repair.

The departmental Capability and Performance Review ahead of FY17 led to approved SLA changes for 27 solutions (excluding DLC), of which 10 led to a tightening of the SLA. All but 5 of the changes were in DOT. Of the 27 SLA changes, only 7 were for high volume solutions (> 100 requests for the year), with 4 SLAs being tightened and 3 being expanded.

The CY17 focus areas will be outlined at the end of this presentation.

Data Source and Reuse of Analysis


dataMontgomery
Sign Up
Log In
Montgomery County Home
Data Catalog
spendingMontgomery
CountyStat
About
MC311 Service Requests
Manage
More Views
Embed
About
BY TYPE
BY TIME OF DAY
BY CITY
BY GEOGRAPHY
BY MONTH
Sub-Area
Date & Time the MC311 Service Request was opened
2012
2013
Showing all 1,799,923 Rows
SR ID
Opened
Area
Attached Solution SLA Days
Feedback

1181466324 01/22/2014 09:23:00 PM Retiree Benefits
1107797313 07/08/2012 10:08:11 PM Information Request Investment Questions
1107736158 07/09/2012 07:17:00 AM 07/09/2012 07:21:20 AM Closed BIT Retiree Payroll Retiree (ERS) - Direct Deposit Changes
1107467688 07/05/2012 11:56:55 PM 07/09/2012 07:16:18 AM Closed BIT Retiree Payroll Retiree (ERS) - Tax Withholding Forms

FOLLOW UP ITEM: CountyStat to work with DTS to add field to open data set ("Request Type")

FOLLOW UP ITEM: CountyStat to pilot and publish department and/or service area specific "drill-down" presentations modeled on Section 2 and 3 in this presentation.

CountyStat primarily relies on the MC311 Service Requests open dataset from dataMontgomery to conduct the annual MC311 review (outside of the call center metrics). CountyStat augments this data with a small number of additional fields not available to the general public.

The size of the data used for the annual review analysis exceeds the capacity of Excel.

CountyStat therefore leveraged a more automated data discovery tool (Tableau). This more automated approach enables CountyStat to easily "reproduce" this analysis for specific departments, divisions, and services.

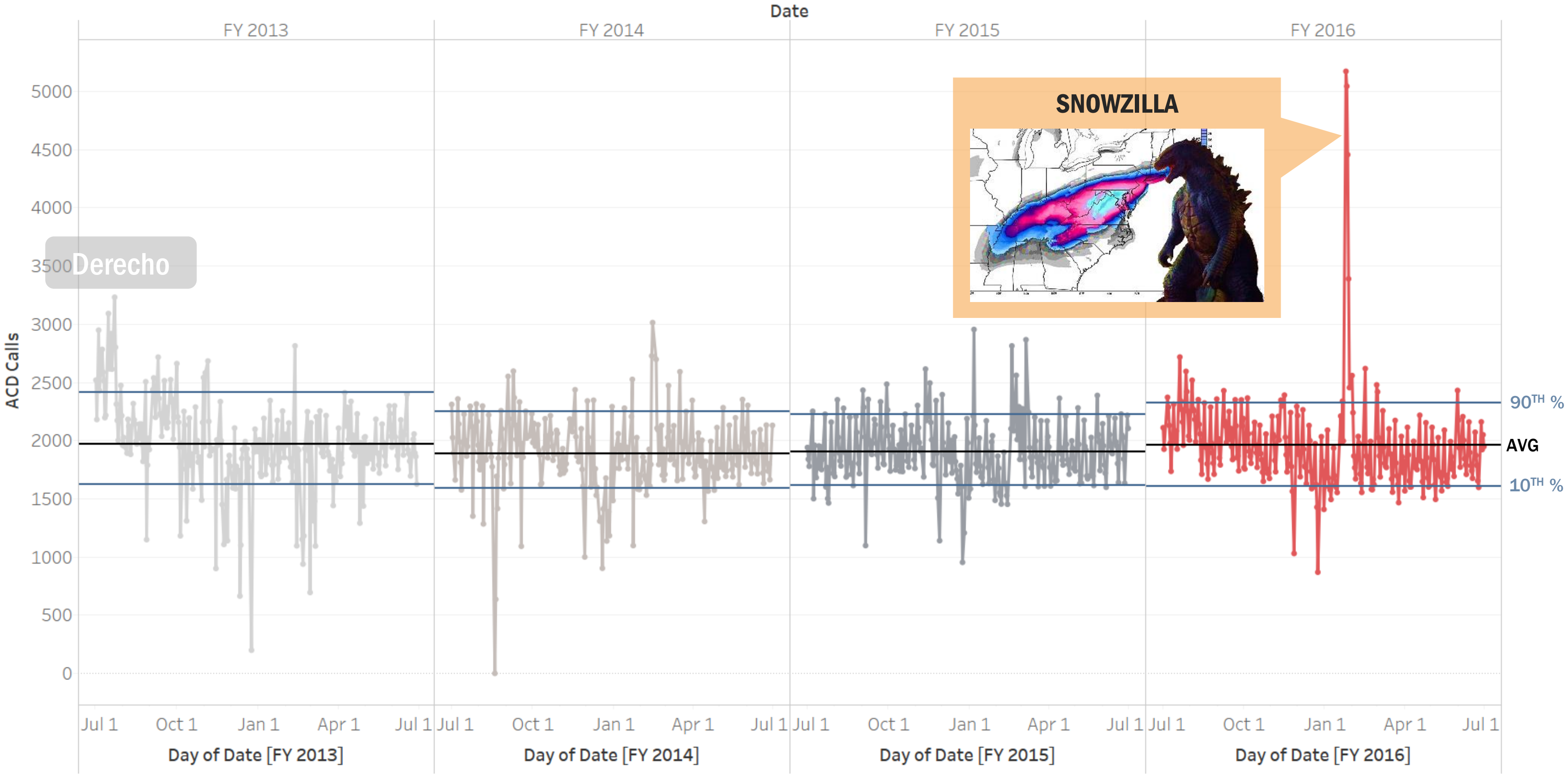
1. CALL CENTER PERFORMANCE

PERFORMANCE MEASURES AND OPERATIONAL METRICS

ACD Call Volume by Fiscal Year

Source: MC311 Siebel CRM (excl. weekends)

CountyStat
Performance Measurement and Management



495,071 calls

474,893 calls

479,897 calls

495,698 calls

Call Center Updates

UPDATES

Physical Move

- MC311 completed its physical move from the Rockville core to Twinbrook on July 11.

Staffing Contract

- MC311 completed a new staff augmentation contract to replace temp contract.
- Vendor provides similar service to NYC and will enable MC311 to scale up during emergencies.

System Upgrades

- DTS is scheduled to complete the Siebel upgrade for universal web browser compatibility by Q3 FY17.
- MC311 has also improved trunk capacity.

Snowzilla

- MC311 played an integral part in the response to the Snowzilla snow storm in January.
- MC311 infrastructure was overwhelmed by call volume.

Silver Spring Apt Fire

- MC311 played an instrumental role in supporting the emergency response to the Silver Spring Fire, including by helping to connect lost family members.

OHR@311

- OHR and MC311 partnered to successfully launch a more tailored experience for County staff, branded as OHR@311.

DLC Call Center

- DLC successfully leveraging MC311's Siebel platform to track calls and requests from customers. MC311 provided technical support and training.

DPS Support

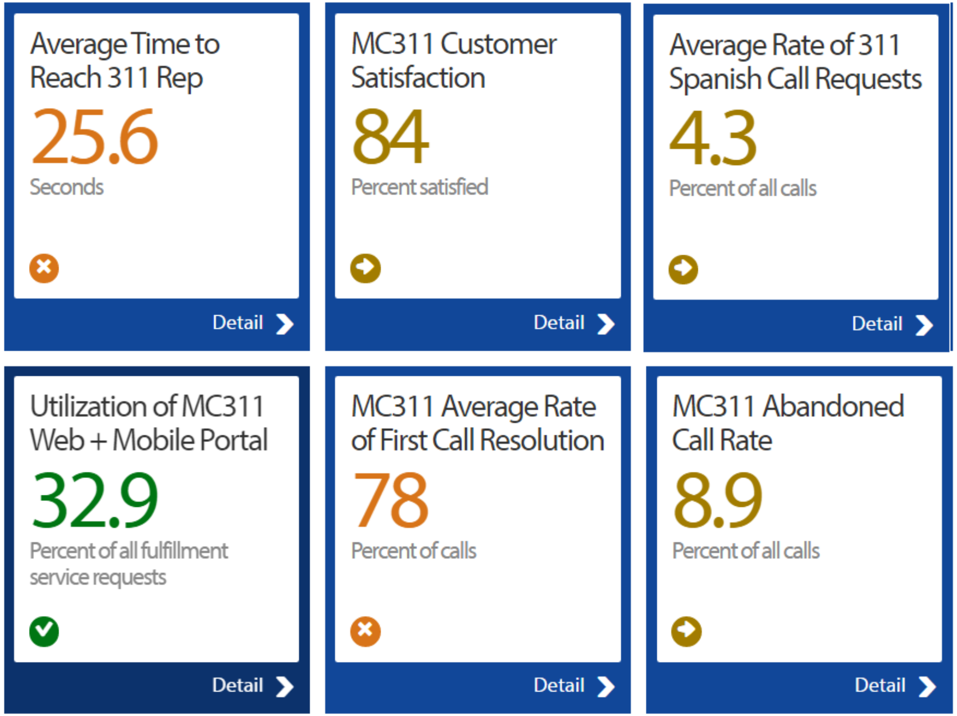
- MC311 supported DPS reorganization and helped reduce number of DPS call escalations. Refined DPS visibility rules for 200 DPS employees across 20 user groups.

This slide describes activities completed in FY16 and ongoing activities for FY17.

In addition to the activities on the left, additional activities included:

- Support for SafeTrack
- Completion of KBA review
- OLO published report on use of MC311 data for budgeting
- New council resolution tasks 311 with taking resident calls on hate / harassment
- MC311 in continued discussion with MCPD to potentially offload additional non-emergency requests.

MC311 Performance Measures for FY16



Average Time to Reach 311 Rep
25.6
Seconds
✖
Detail ❯

MC311 Customer Satisfaction
84
Percent satisfied
➔
Detail ❯

Average Rate of 311 Spanish Call Requests
4.3
Percent of all calls
➔
Detail ❯

Utilization of MC311 Web + Mobile Portal
32.9
Percent of all fulfillment service requests
✓
Detail ❯

MC311 Average Rate of First Call Resolution
78
Percent of calls
✖
Detail ❯

MC311 Abandoned Call Rate
8.9
Percent of all calls
➔
Detail ❯

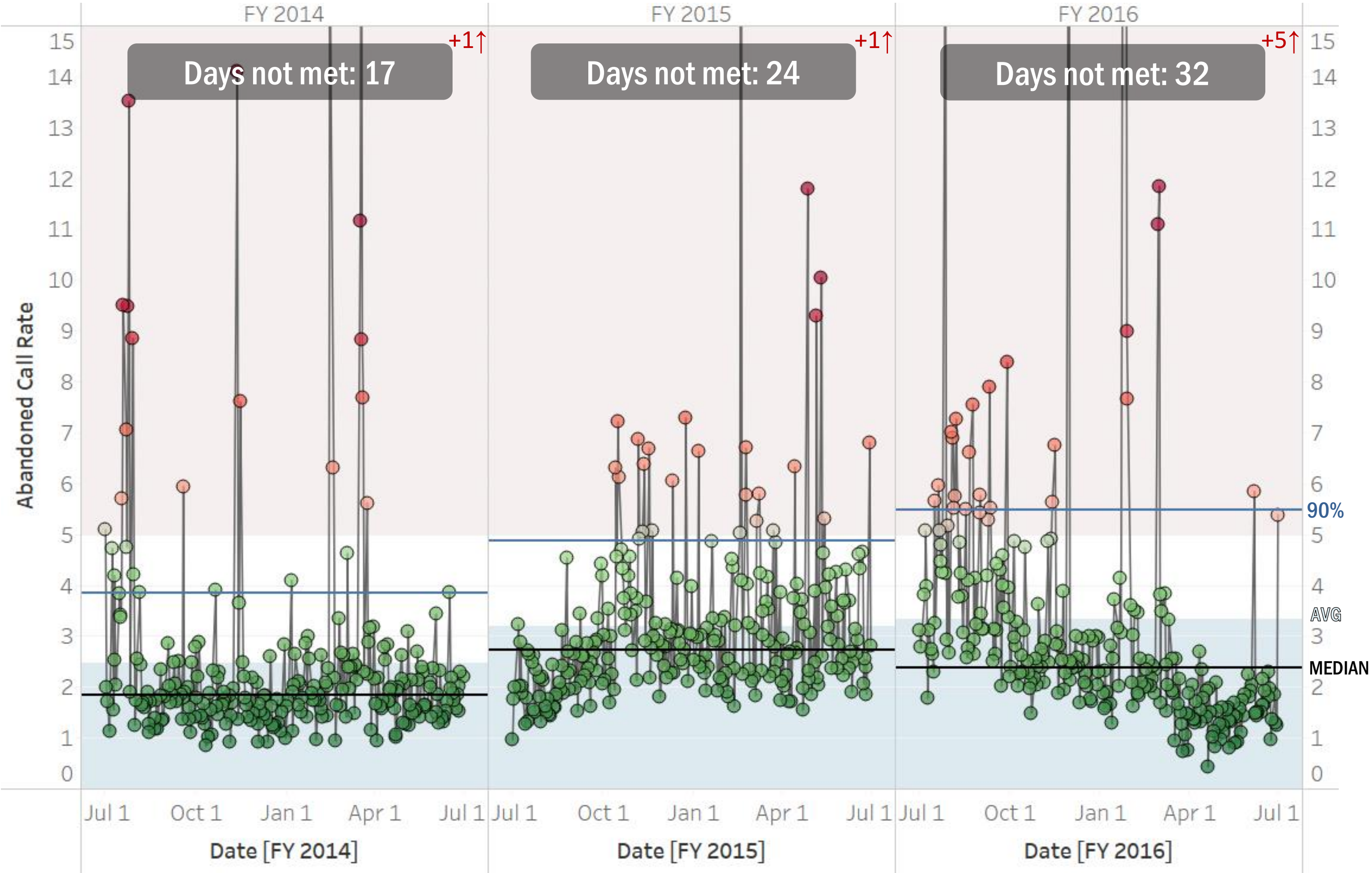
In FY15, MC311 and CountyStat implemented 5 additional headline performance measures.

In FY16, MC311 held steady on three metrics and saw an improvement in web utilization. The average time to reach a 311 rep increased, in part due to high outliers during the Snowzilla snow storm. The rate of first call resolution also fell slightly, as fulfillment service requests outpace general information requests.

Source / notes

https://reports.data.montgomerycountymd.gov/countystat/department/pio

Abandoned Call Rate (Goal = 5%)



CountyStat has implemented new visualizations for tracking call center performance to better examine within-year changes and to reduce the influence of outliers. Every dot is a daily average.

While MC311 experienced high rates in the first quarter and again during Snowzilla, the abandoned call rate has dropped significantly in the second half of FY16.

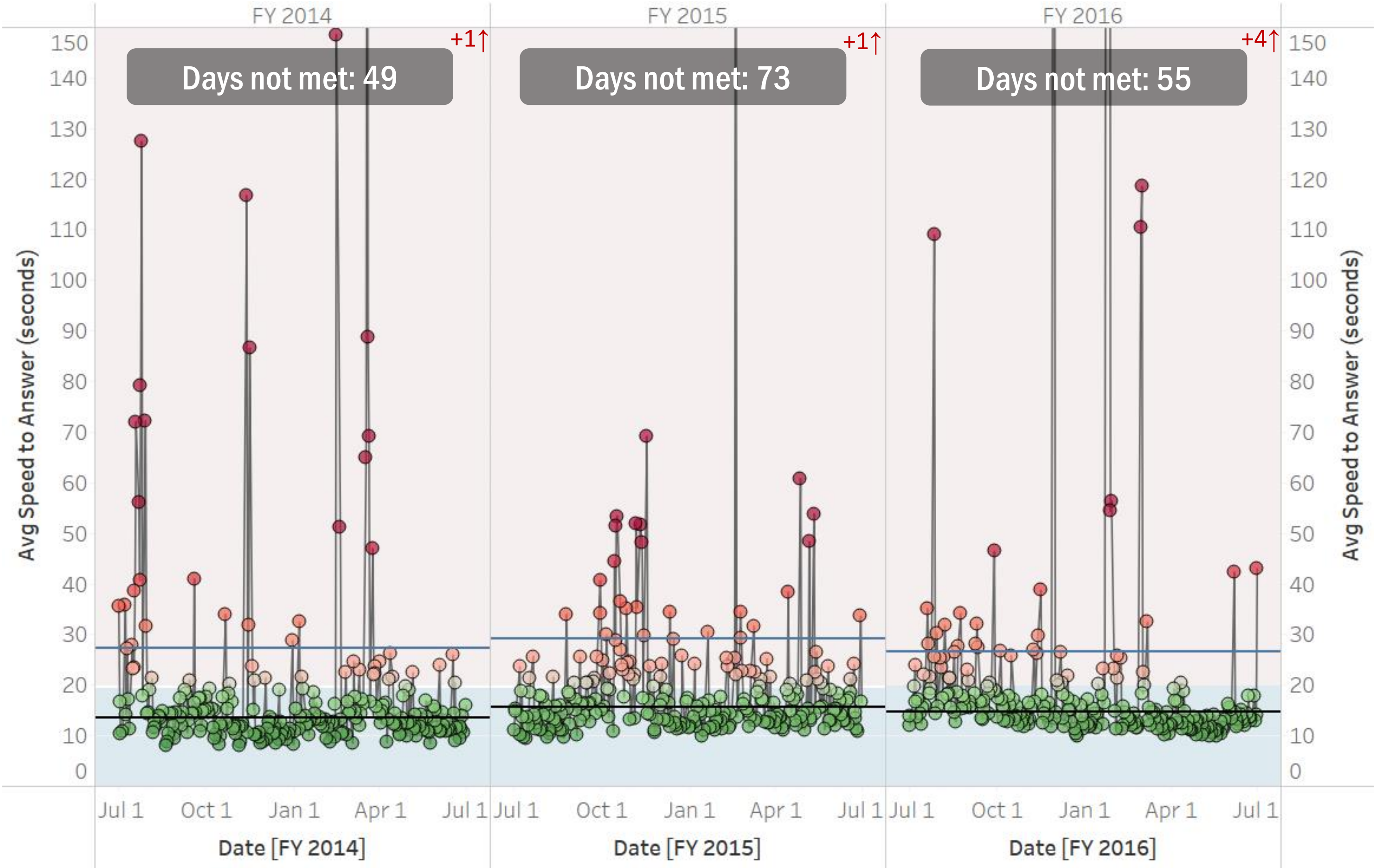
YEAR	AVG	MEDIAN	90TH %
FY14	2.5	1.8	3.9
FY15	3.2	2.7	4.9
FY16	3.3	2.4	5.5

Source / notes

MC311 Siebel Call Center Scorecard (weekends excluded; “hang up/dropped call” SRs not included)

Average Time to Reach a 311 Call Representative (Goal = 20s)

CountyStat
Performance Measurement and Management



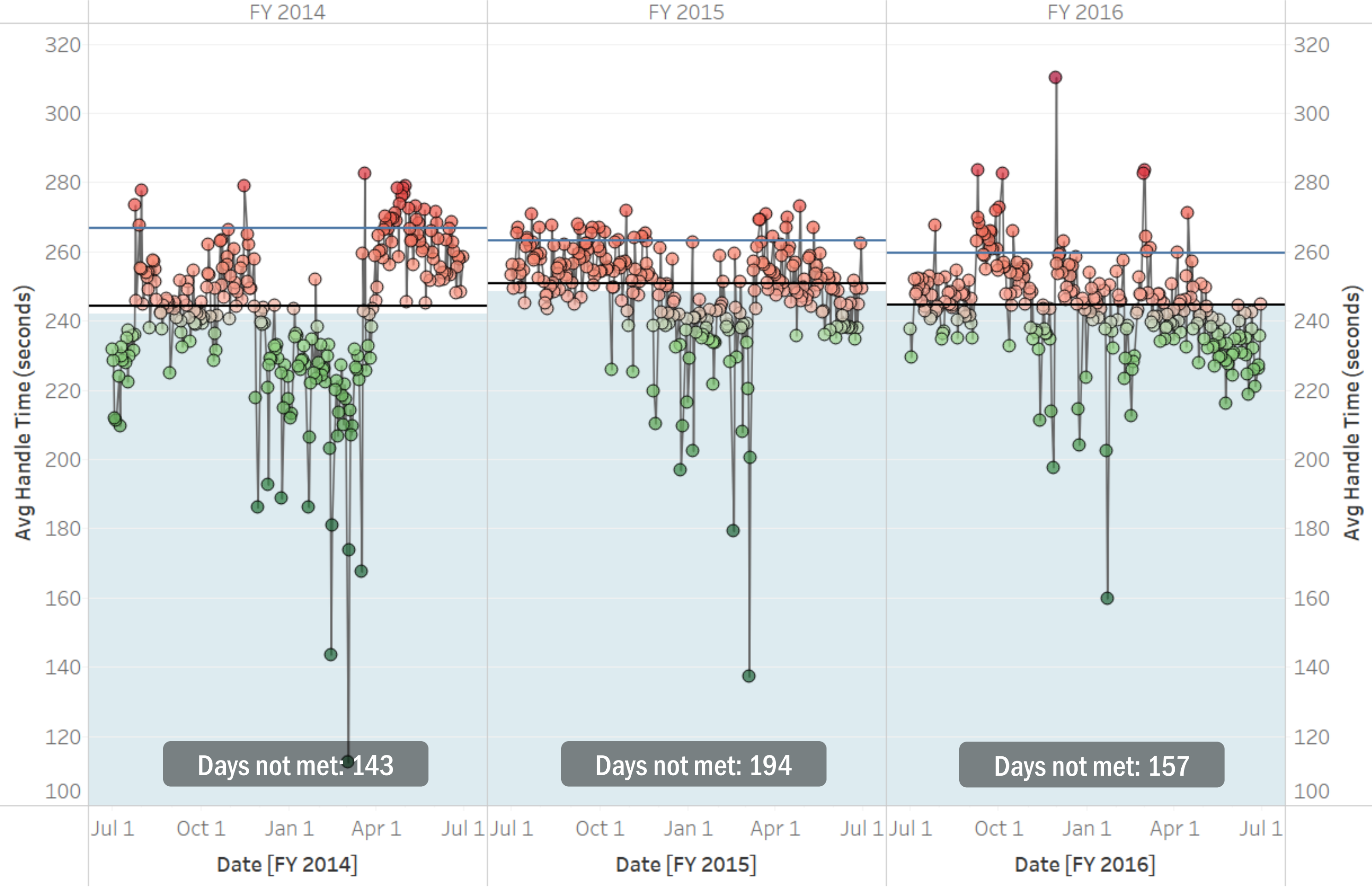
The average time to reach a 311 representative increased for the year, but this is largely due to a few significant outliers related to Snowzilla. The median, 90th percentile, and number of days not met have all dropped compared to FY15.

YEAR	AVG	MEDIAN	90TH %
FY14	15.9	13.5	27.3
FY15	16.6	15.7	29.3
FY16	17.9	14.6	26.6

Source / notes

MC311 Siebel CRM Dashboard (excl. weekends)

Average Handle Time (Goal = 240 seconds)



As with the other metrics, MC311 has seen a notable improvement on this measure in the last quarter of FY16.

Days that did not meet the 240 second target tended to have a higher number of SR fulfillment requests.

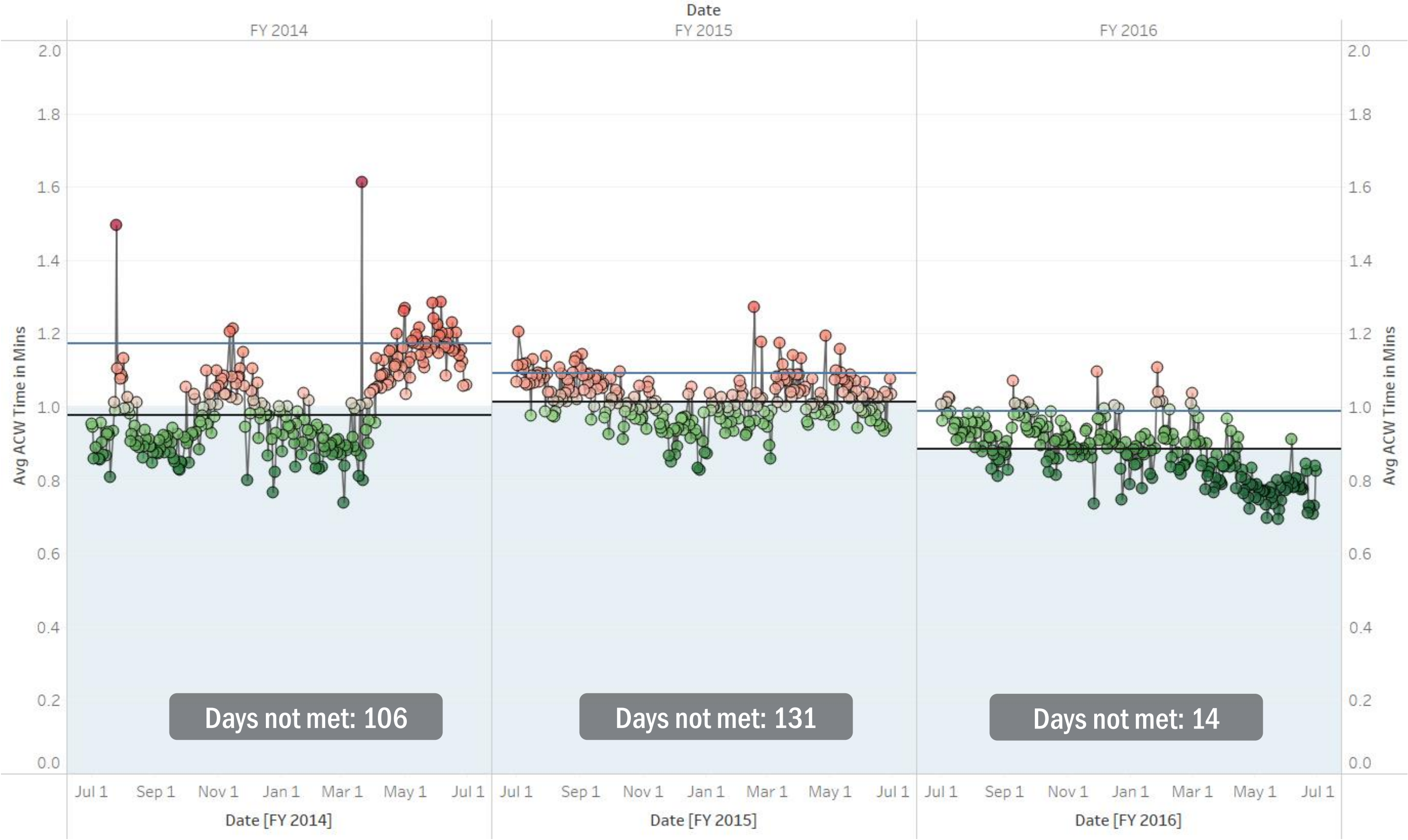
FOLLOW UP ITEM: Explore potentially adjusting this standard to match capabilities.

FOLLOW UP ITEM: CountyStat to continue to evolve new call center visualizations to help evaluate performance of new contractor.

Source / notes

MC311 Siebel CRM Dashboard (excl. weekends)

After Call Work (Goal = 1 minute)



Days not met: 106

Days not met: 131

Days not met: 14

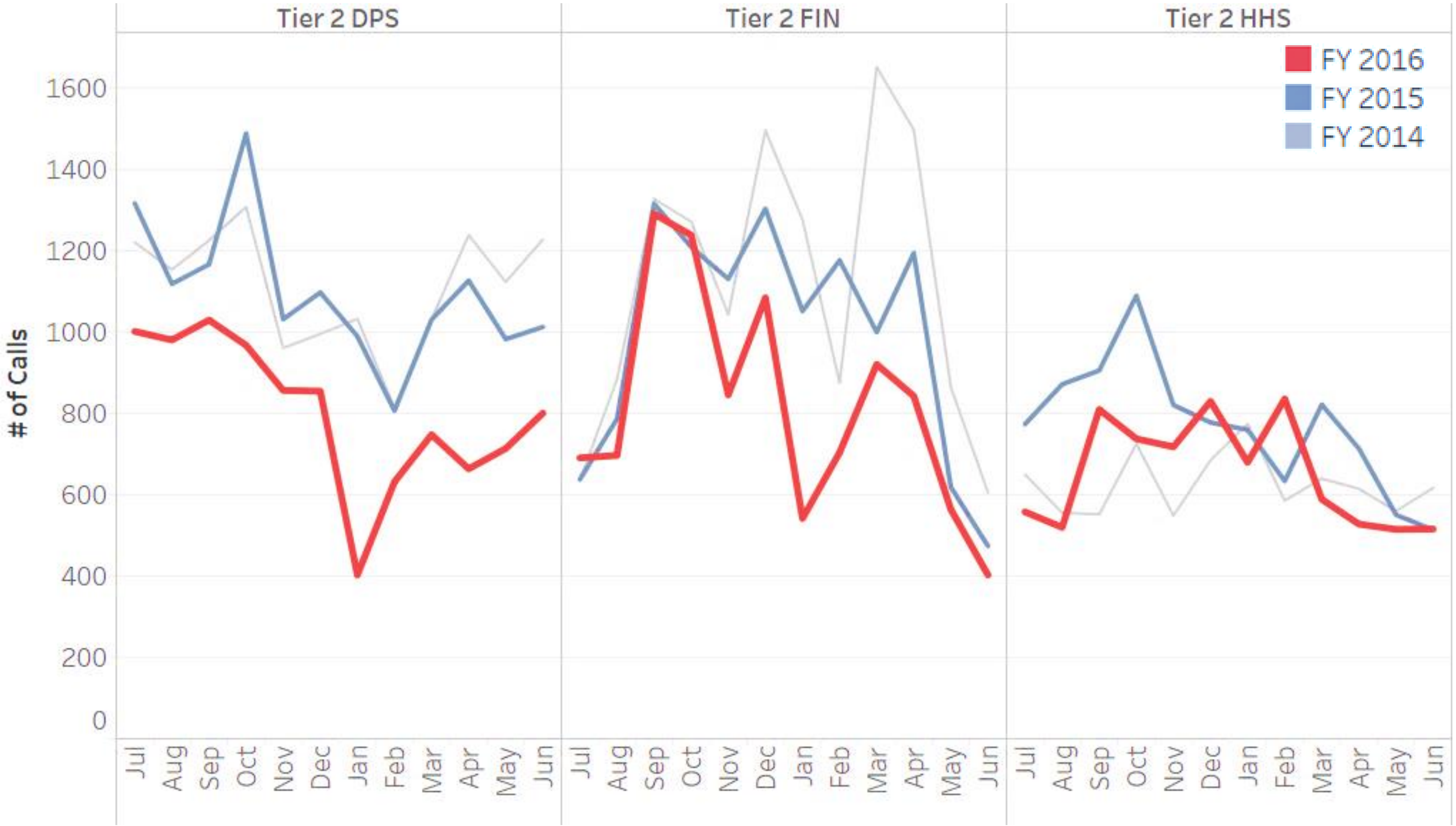
The call center has consistently met the 1 minute target, a notable improvement over FY15.

Source / notes

MC311 Siebel CRM Dashboard (excl. weekends)

Tier 2 Call Volume

CountyStat
Performance Measurement and Management



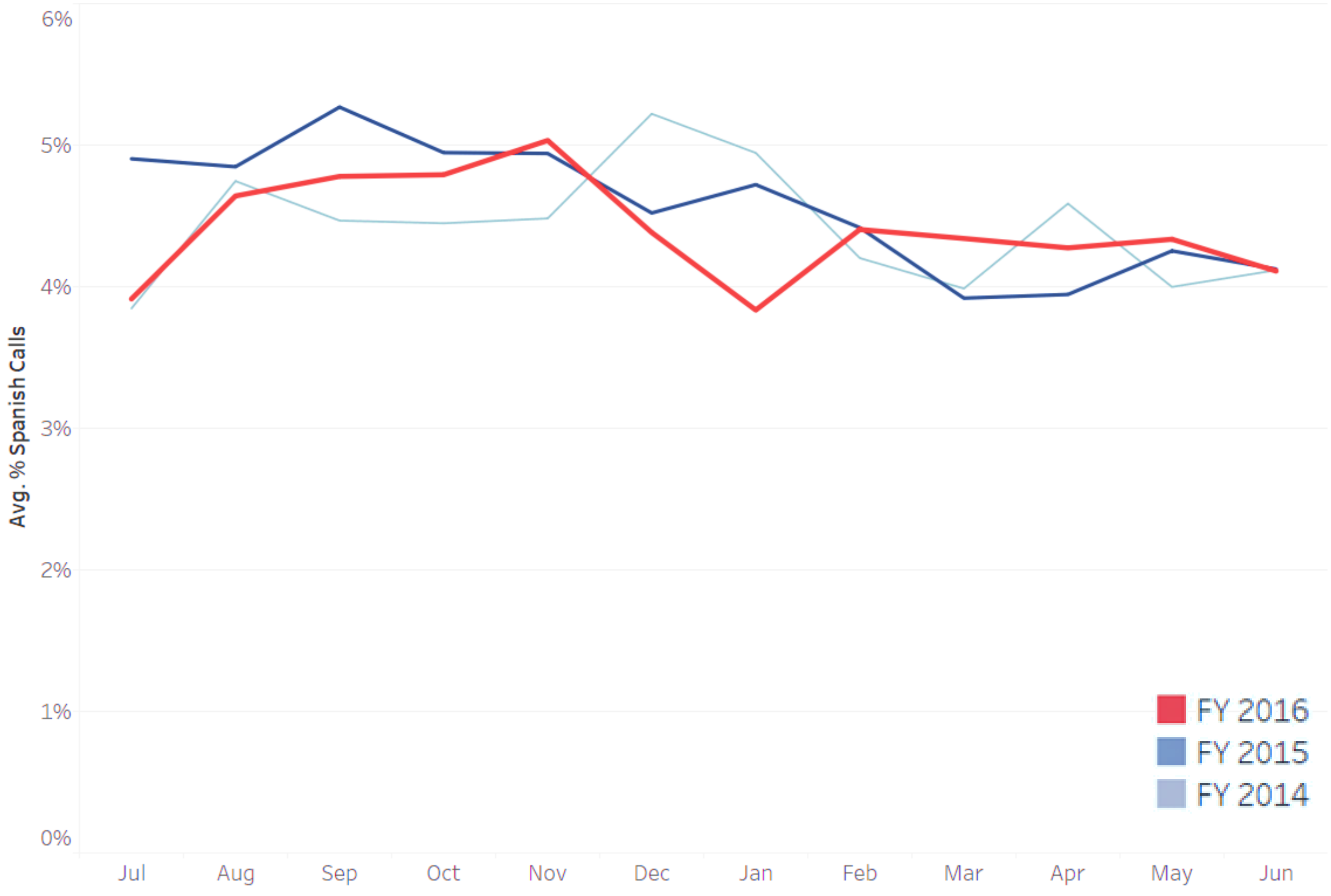
MC311 uses Tier 2 call-takers to resolve select HHS, FIN, and DPS calls that require additional knowledge or skills. OHR was added in FY17.

Tier 2 volume is down across the board. Overall, **5.4% of calls** went through Tier 2, down from 7.1% and 7.2% in FY16 and FY17 respectively.

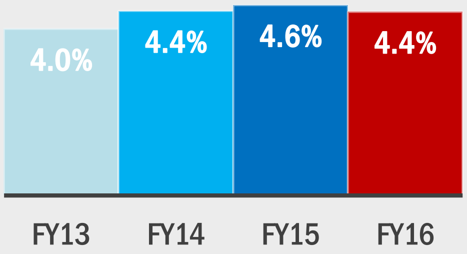
Source / notes

MC311 Siebel CRM

Calls in Spanish



% Spanish



Volume is down slightly (500 calls) for the fiscal year, primarily due to drop in Transit related requests.

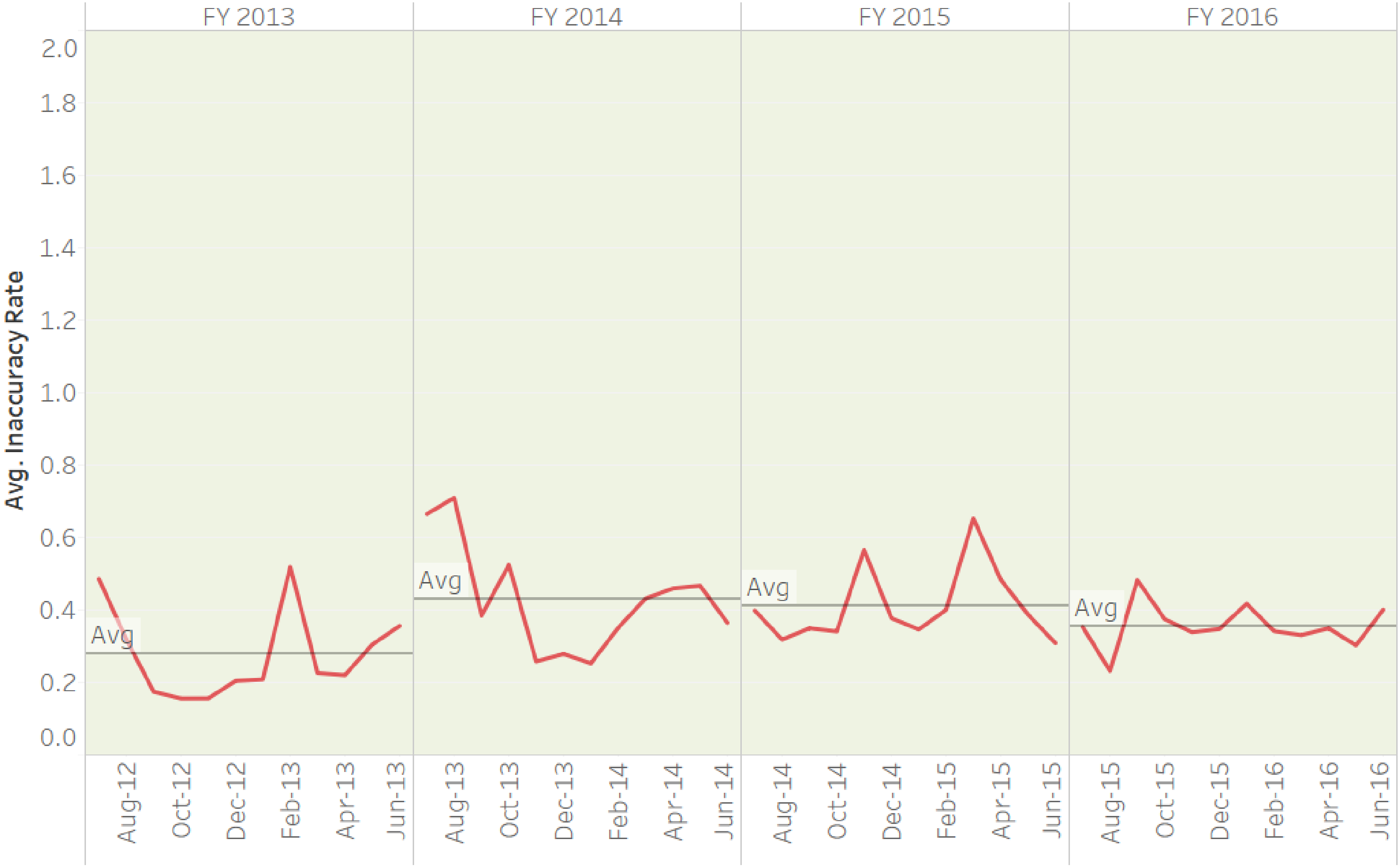
Popular Spanish language requests incl.:

1. MD Health Care Connection (#11 Eng)
2. MANNA Food Referral (#33 Eng)
3. Schedule DPS Inspection (#2 Eng)
4. Ride On Real-time Arrival (#1 Eng)
5. Bulk Trash Pickup (#3 Eng)
6. Comcast Customer Service (#43 Eng)

Source / notes

MC311 CSC Scorecard and Siebel CRM. Rankings rely on "preferred language" field, which may not be 100% accurate.

Inaccuracy Rate (Inverse of “Accuracy Rate”) (Goal: < 2%)



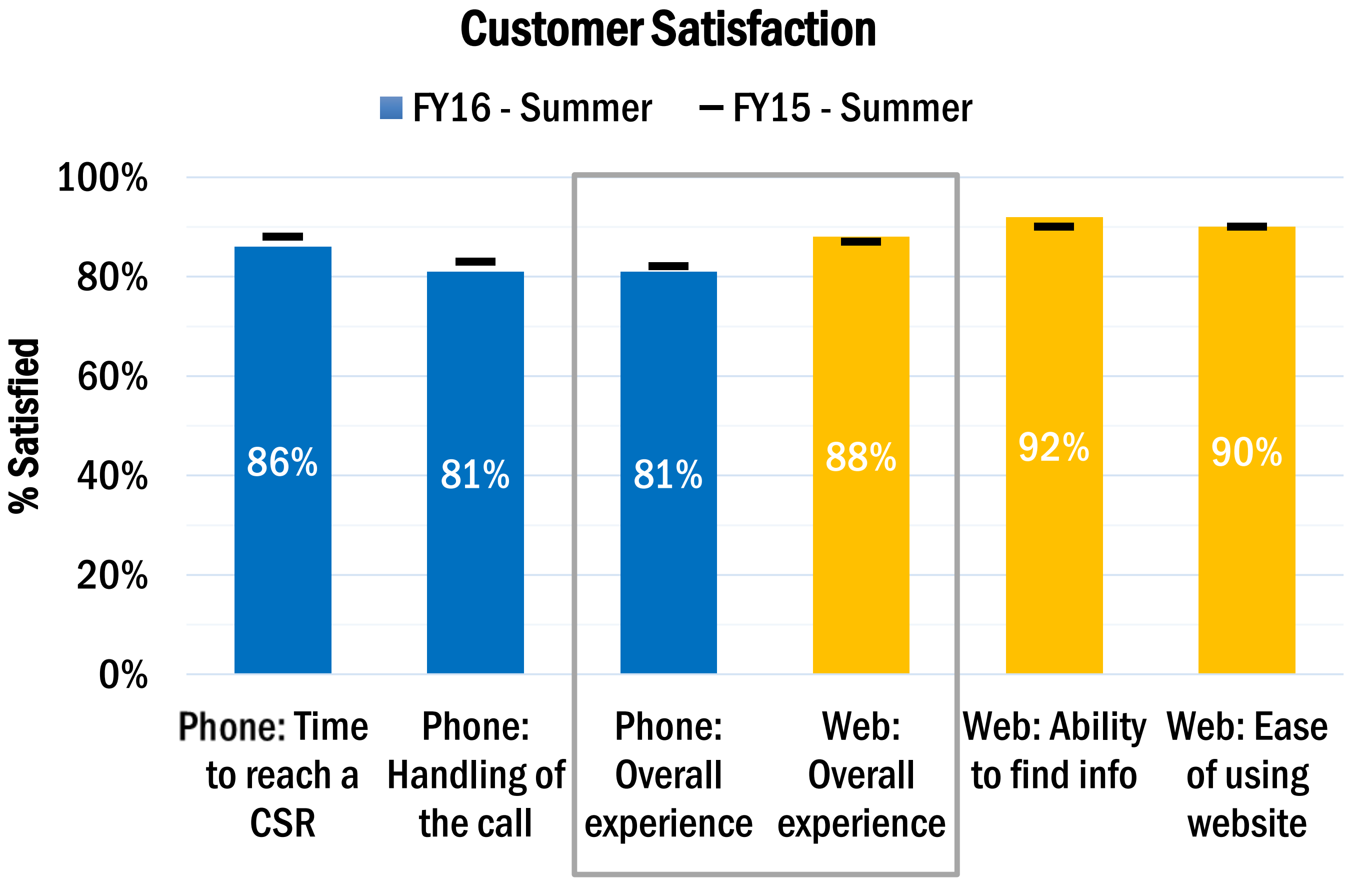
The inaccuracy rate is in the inverse of the accuracy rate that MC311 reports on.

Note that accuracy rate is consistently above 99.5%, a slight improvement over the past 2 years.

Source / notes

MC311 Siebel CRM

FY15 Results: Semi Annual Customer Survey



Performance on the customer satisfaction survey is largely consistent with last year, despite Snowzilla. The results are based on 1,100 user responses.

Web users continue to report a better overall experience.

MC311's internal customer survey saw a slight increase in the percent of respondents rating service request accuracy as "excellent" or "good," from 70% (2015) to 73% (May 2016).

Technical Infrastructure Update

MC311 encountered a relatively low number of technical / infrastructure incidents in FY16, but was challenged by unprecedented volume during the Snowzilla snow storm in January.

NOTABLE EVENTS

Jan 18 (Mon)

MLK day. Switch left open, causing artificial abandoned calls.

Jan 19 (Tue)

First 101 calls missed before switch was opened at 7:30 am.

Jun 6 (Mon)

Network outage from 10:20 to 10:40am preventing CSRs from taking calls.

Jun 21 (Tue)

Avaya license server issue causing outage from 7:00 to 7:20am.

Aug 2 (Tue)

Issues with the data used to generate the CSC scorecard. No impact on call center operations. Not yet resolved.

Nov 10 (Thu)

Brief outage.

> 100 abandoned calls | > 5% abandoned call rate | > 20 sec Avg Speed to Answer

This slide reports on technical issues and events encountered in FY16 (and FY17 YTD).

FOLLOW UP ITEM: MC311, CountyStat, and DTS to ensure integrity of CSC scorecard data.

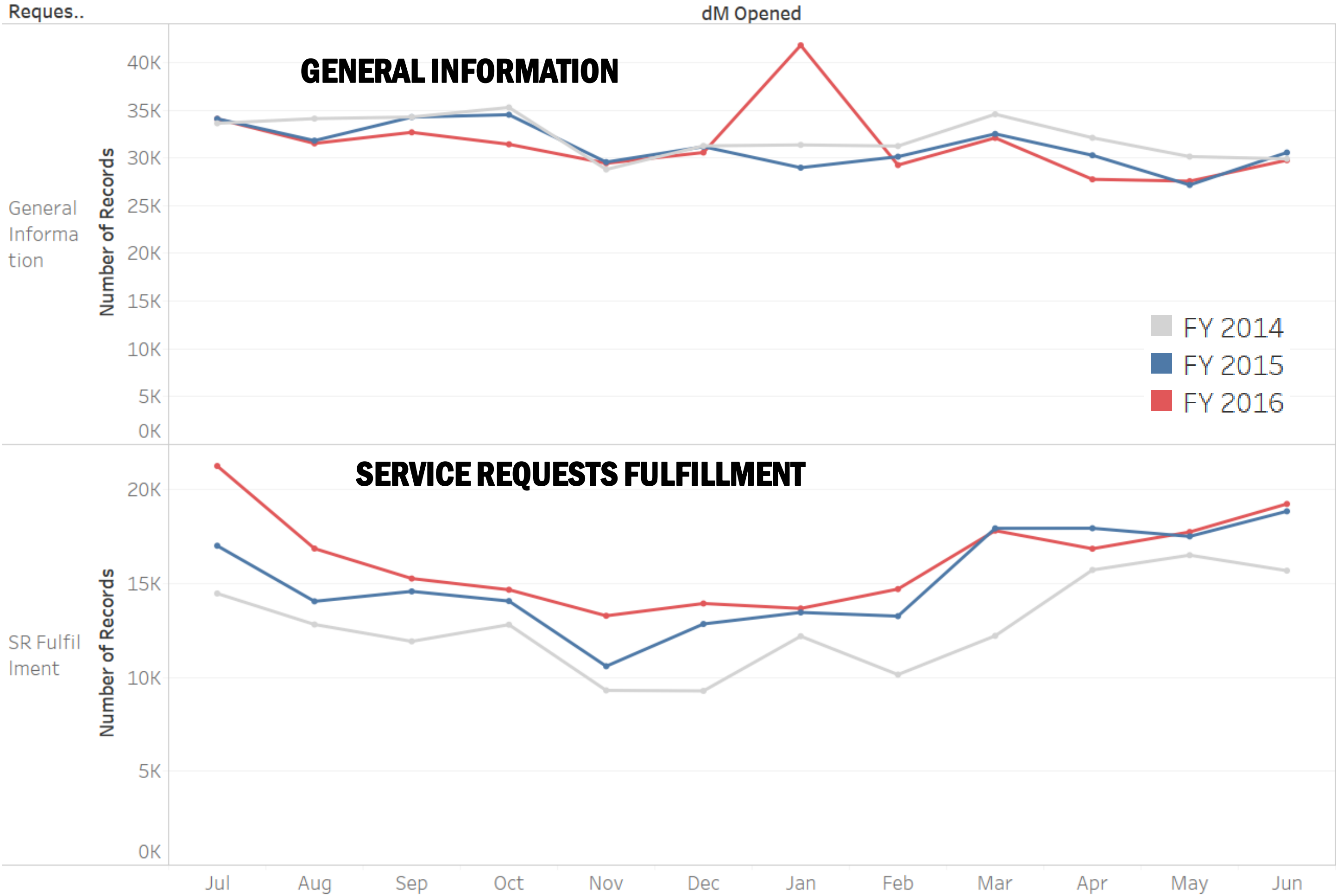
Source / notes

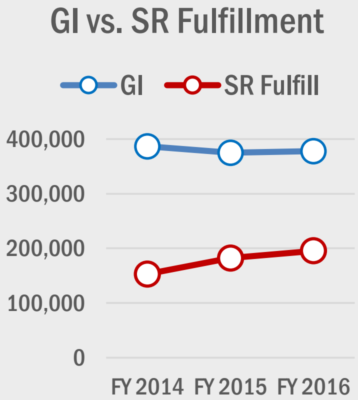
MC311 technical log

2A. SERVICE REQUEST VOLUME

TREND ANALYSIS

GI and SR-Fulfill Growth Over Time



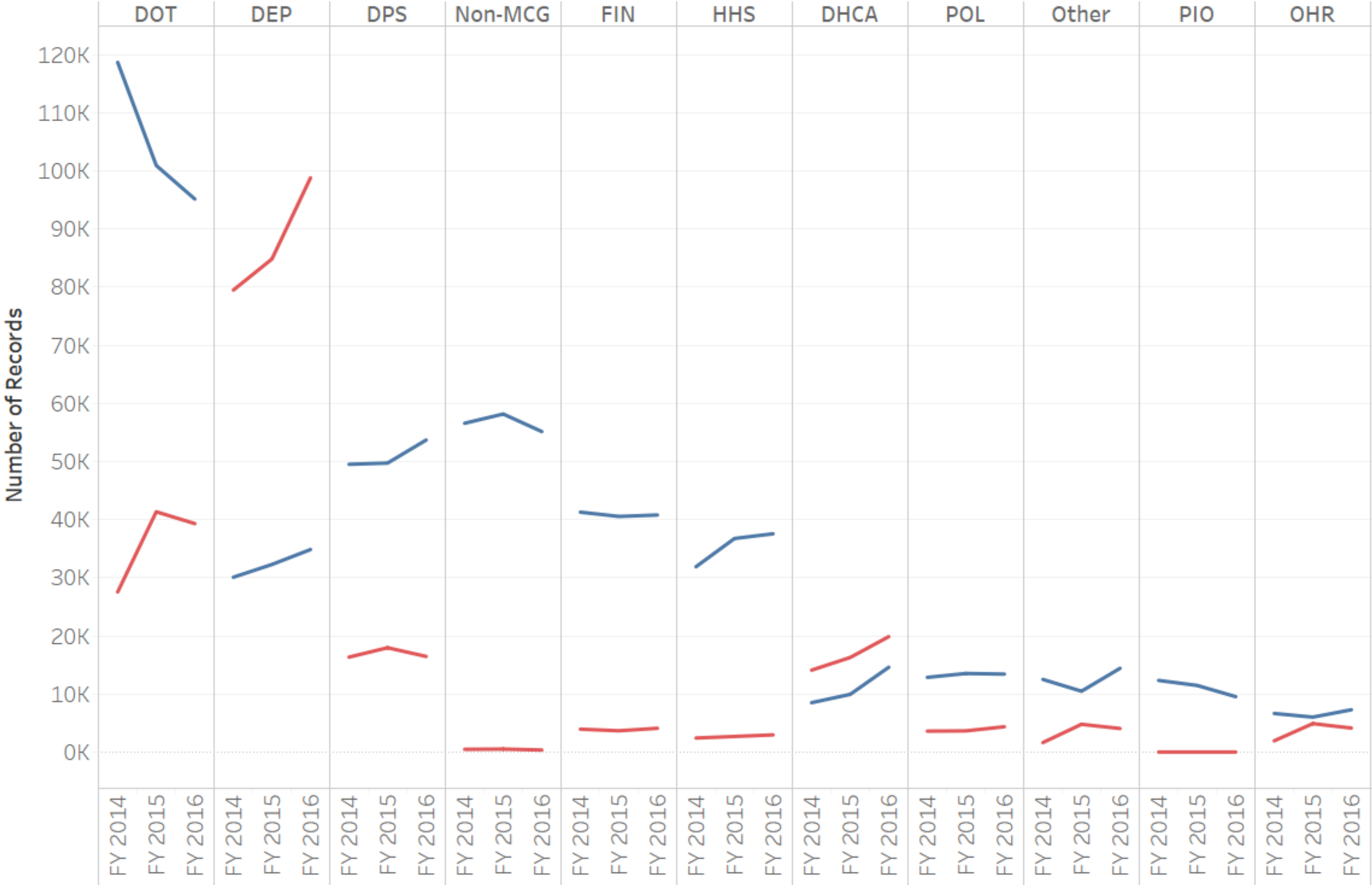


GI increased very slightly, in part due to high volume during Snowzilla. SR fulfillment volume continued to grow in FY16.

Source / notes

MC311 Siebel CRM data
Note: Excludes DLC Call Center.

Change over Time by Department



DEP (esp. Solid Waste) and DHCA continue to see increases in volume, particularly for fulfillment SRs, but also for general information requests.

DPS has seen a shift from fulfillment SRs to GIs.

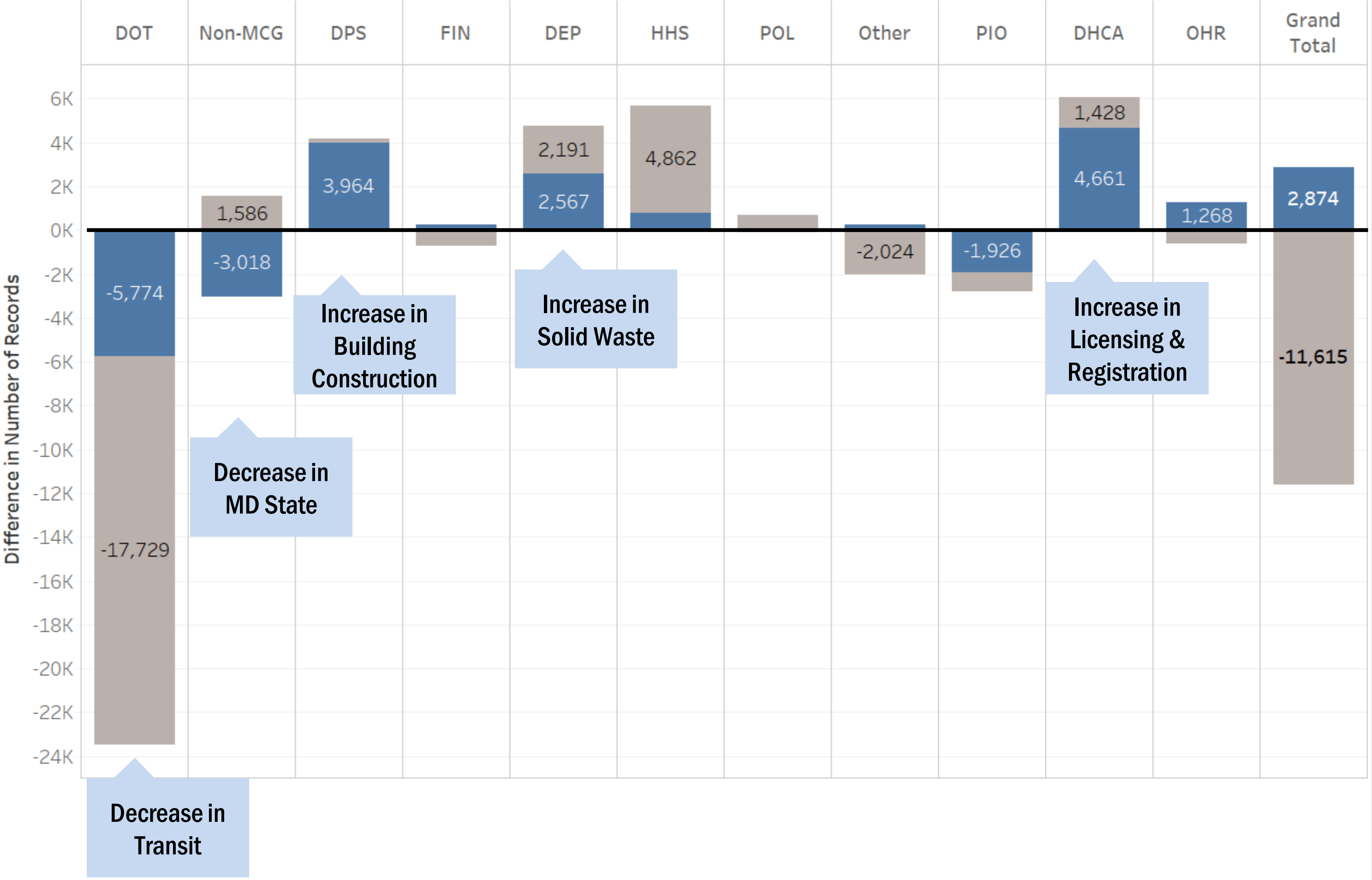
DOT continues to see a large drop in GI volume as residents switch to self-service digital options for transit navigation. DOT fulfillment SR volume is down primarily due to lower internally generated requests.

🟦 **General Information**
🟥 **Service Reqs, Complaints, Referral**

Source / notes

MC311 Siebel CRM data

Change in GI Volume



Decrease in Transit

Decrease in MD State

Increase in Building Construction

Increase in Solid Waste

Increase in Licensing & Registration

General Information requests saw a slight increase in FY16. This increase was primarily driven by DHCA (esp. Licensing and Registration) and DPS (esp. Building Construction).

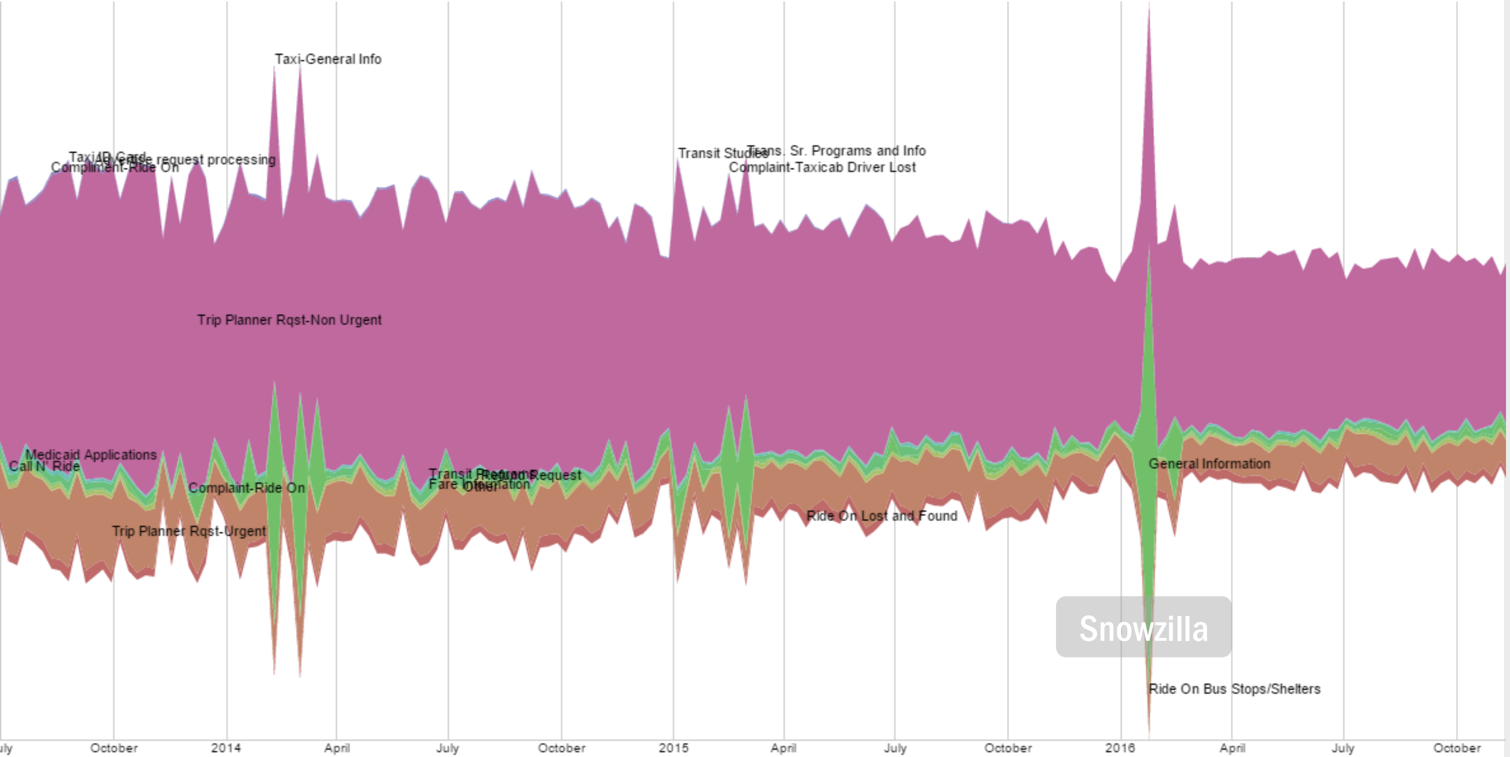
DOT's decrease in GI (and Fulfillment SRs) is despite a 10,000+ increase in requests for snow removal.

▨ FY 2015
■ FY 2016

Source / notes

MC311 Siebel CRM

Continuing Shrinking of Transit GI Calls

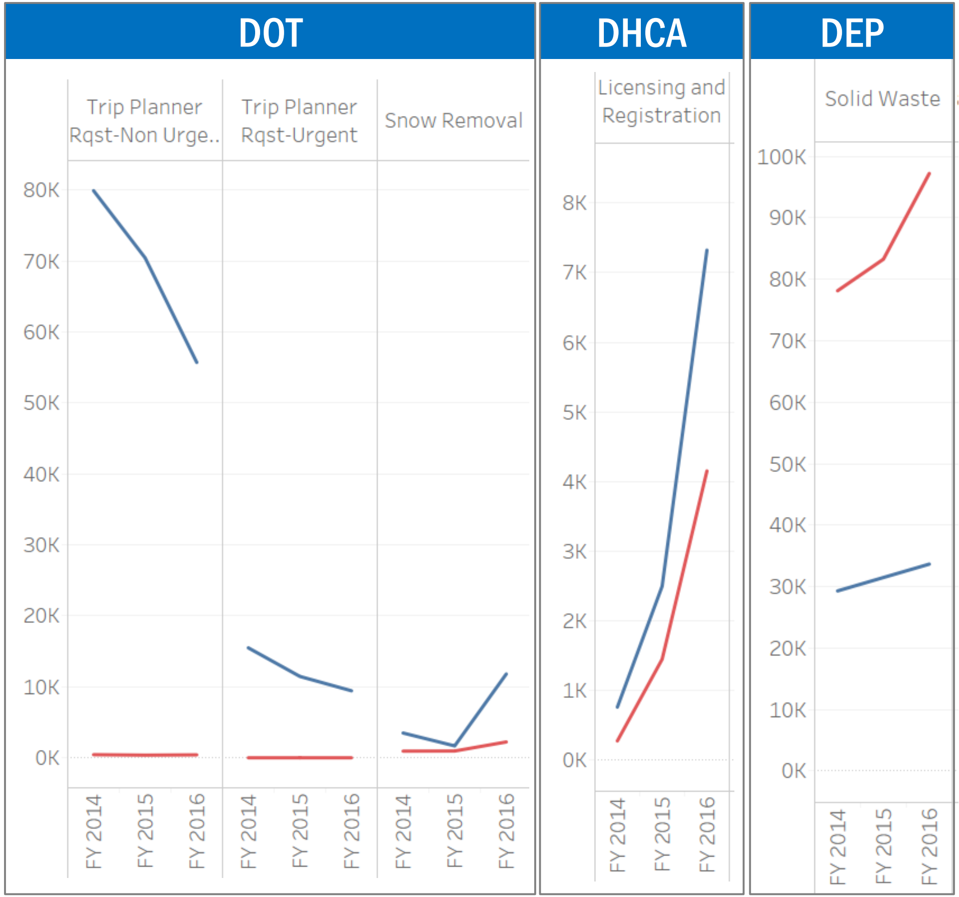


DOT Transit general information requests continue on a persistent decline in volume.

Source / notes

MC311 Siebel CRM data

Change over Time by Department



This slide shows the areas driving the decline in DOT GI volume and the increase in DHCA and DEP volume.

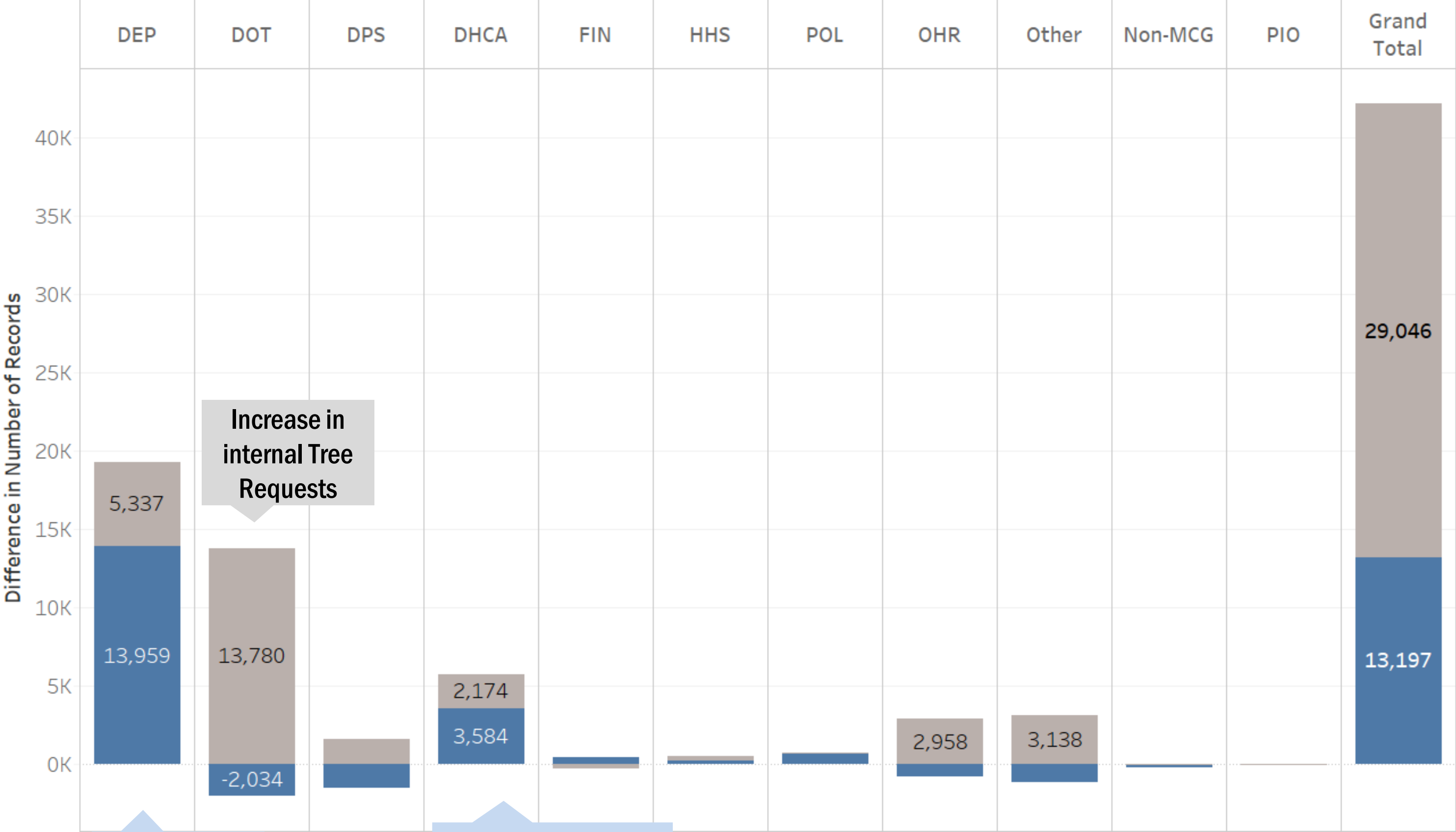
Note that DOT Transit GI requests typically take 100 seconds to open and close out, which is among the shortest times. By comparison, for instance, DHCA L&R GI requests take about 200 seconds (rough estimates; excluding outliers).

🟦 **General Information**
🟥 **Service Reqs, Complaints, Referral**

Source / notes

MC311 Siebel CRM data

FY15 Change in SR Fulfillment Volume



Increase in internal Tree Requests

Increase in Solid Waste

Increase in Code Enforcement and esp. Licensing & R

Service request volume increased at a slower pace than last year. Most increases came from DEP and, to a lesser extent, DHCA. DOT is down, in part due to fewer internally generated tree requests.

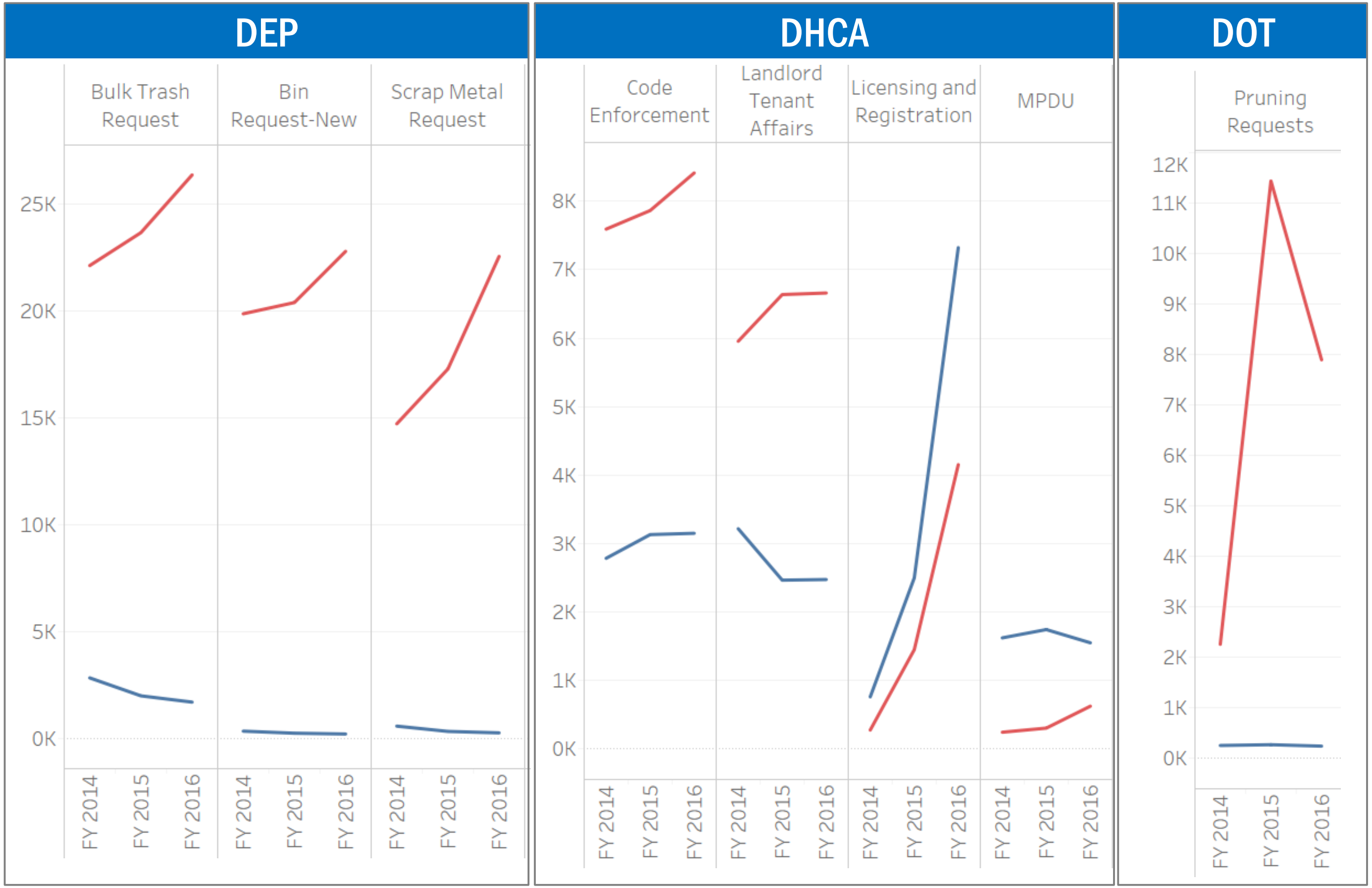
🟫 FY 2015
🟦 FY 2016

Source / notes

MC311 Siebel CRM

Change over Time by Department

CountyStat
Performance Measurement and Management



This slide shows the service areas and sub-areas driving increases for DEP and DHCA and decreases for DOT.

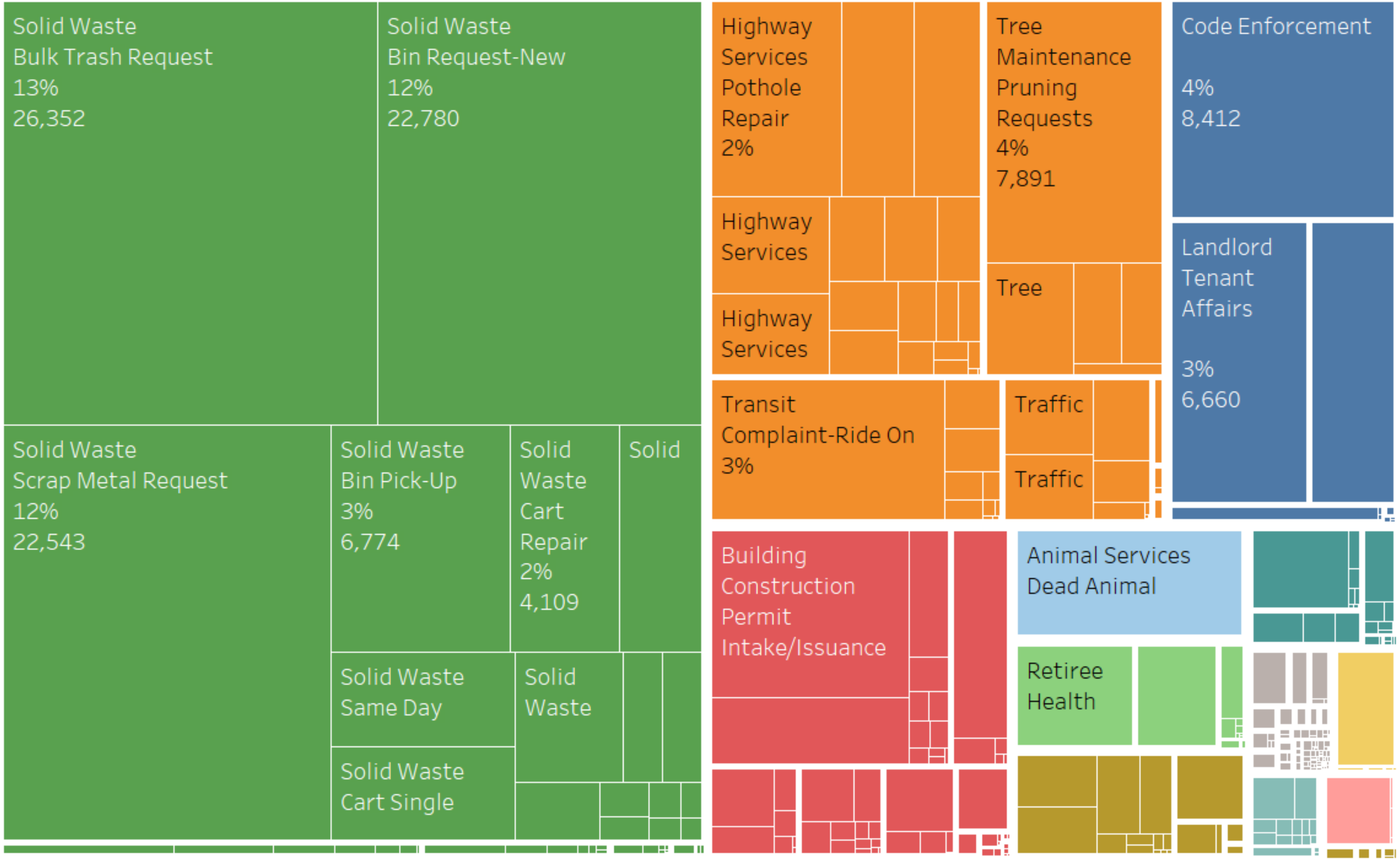
🟦 **General Information**
🟥 **Service Reqs, Complaints, Referral**

Source / notes

MC311 Siebel CRM data

Treemap: Service Requests Fulfillment in FY16

CountyStat
Performance Measurement and Management



This visualization shows the distribution and relative popularity of fulfillment service requests.

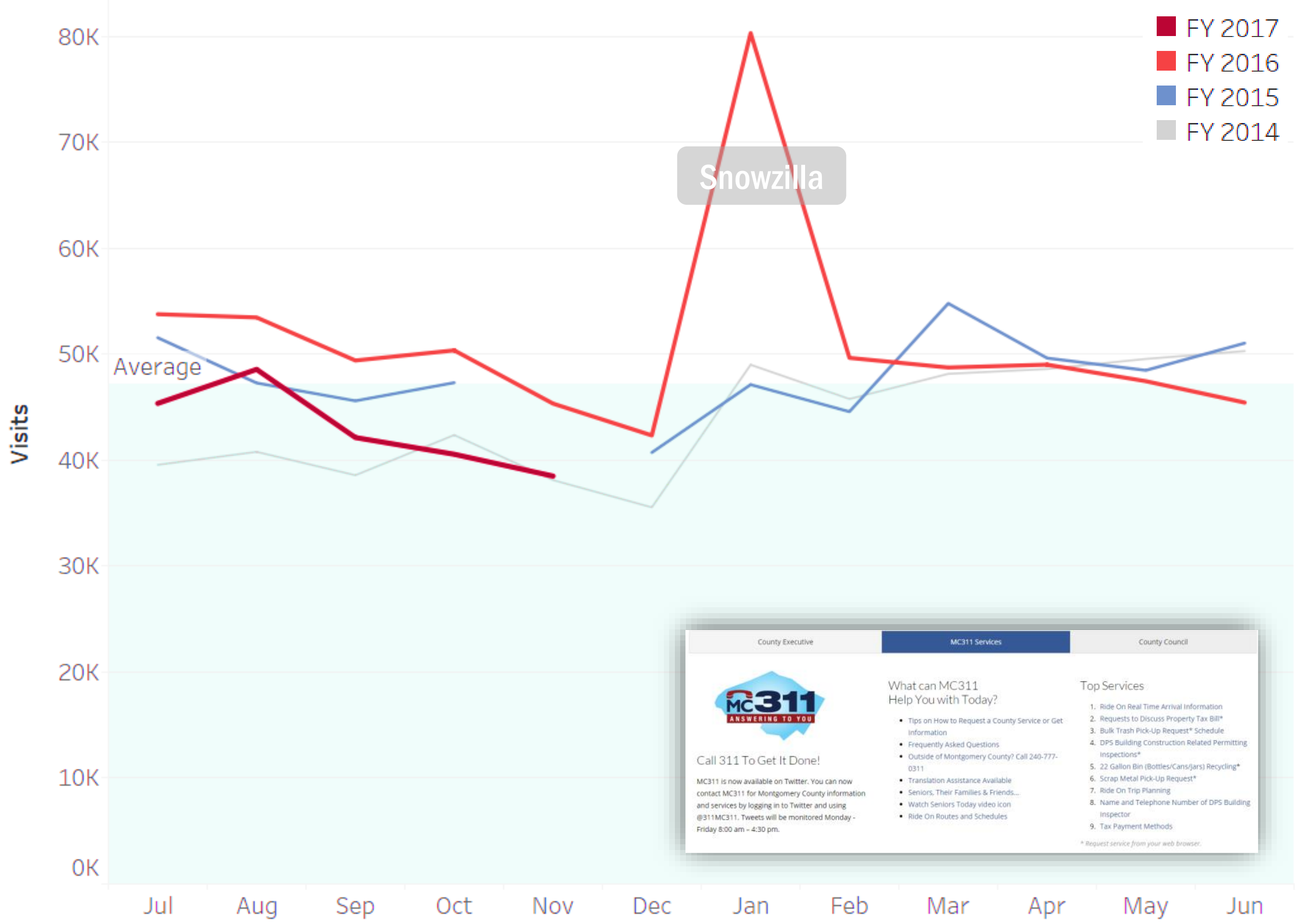
Source / notes

MC311 open data

2B. WEB-BASED SERVICE REQUESTS

TREND ANALYSIS

MC311.com Web Visits and Conversions



Call 311 To Get It Done!

MC311 is now available on Twitter. You can now contact MC311 for Montgomery County information and services by logging in to Twitter and using @311MC311. Tweets will be monitored Monday - Friday 8:00 am - 4:30 pm.

What can MC311 Help You with Today?

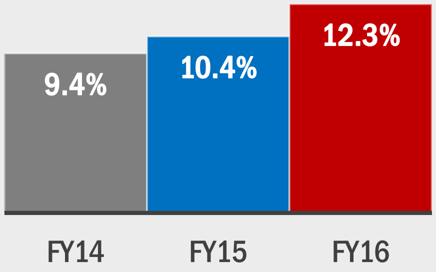
- Tips on How to Request a County Service or Get Information
- Frequently Asked Questions
- Outside of Montgomery County? Call 240-777-0311
- Translation Assistance Available
- Seniors, Their Families & Friends...
- Watch Seniors Today video icon
- Ride On Routes and Schedules

Top Services

1. Ride On Real Time Arrival Information
2. Requests to Discuss Property Tax Bill*
3. Bulk Trash Pick-Up Request* Schedule
4. DPS Building Construction Related Permitting Inspections*
5. 22 Gallon Bin (Bottles/Cans/Jars) Recycling*
6. Scrap Metal Pick-Up Request*
7. Ride On Trip Planning
8. Name and Telephone Number of DPS Building Inspector
9. Tax Payment Methods

** Request service from your web browser.*

Conversion Rate (SRs / Visits)



Web visits reached an all-time high. In addition, page views (not shown in chart) were higher every month in FY16 vs. past years. However, the number of visits dropped off near the end of FY16, a trend which persists in FY17.

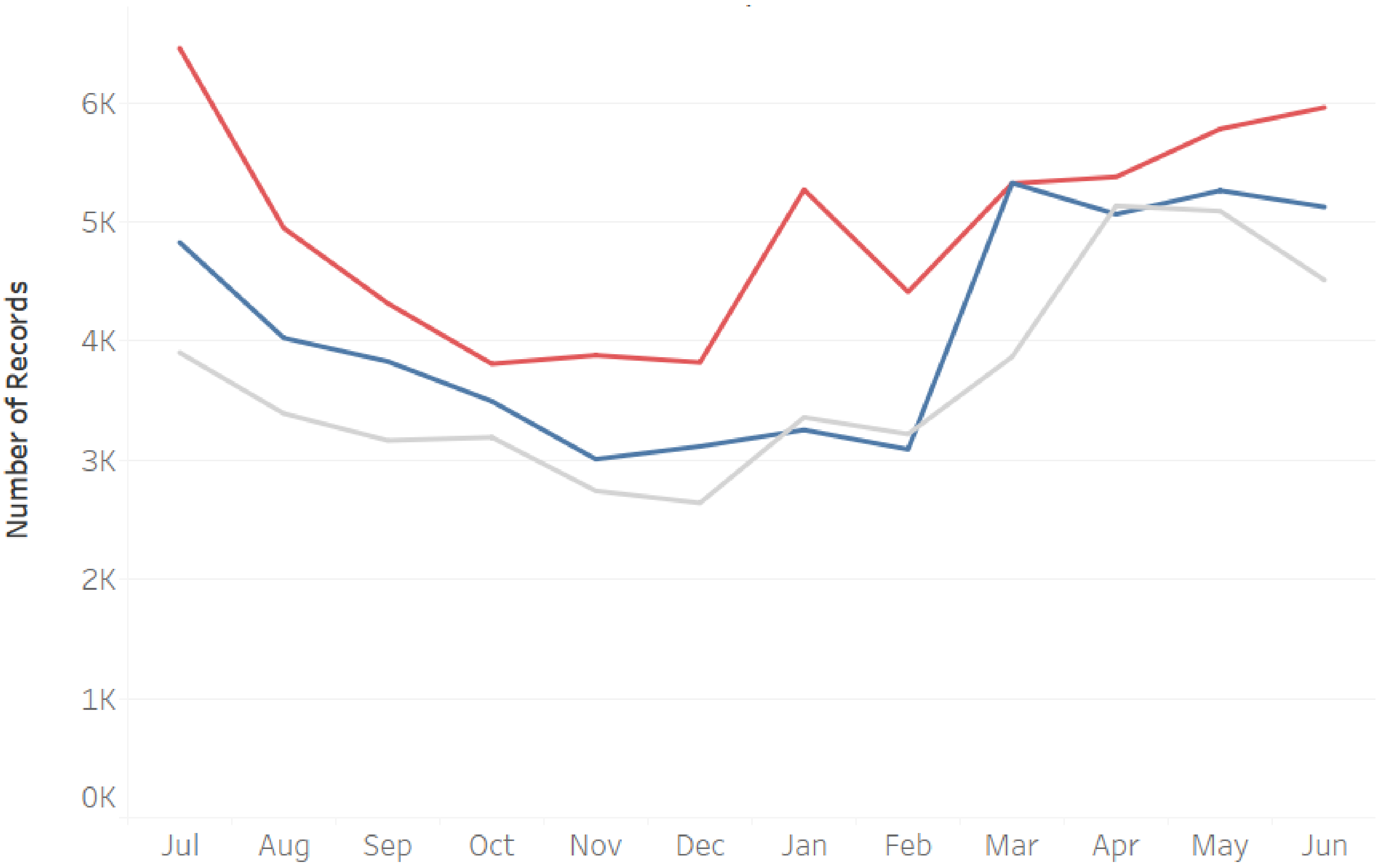
FOLLOW UP ITEM: Ensure MC311 is prominently featured on the MC website

Source / notes

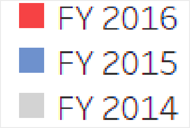
MC311 Siebel

Use of Web Fulfillment Service Requests On the Rise

CountyStat
Performance Measurement and Management



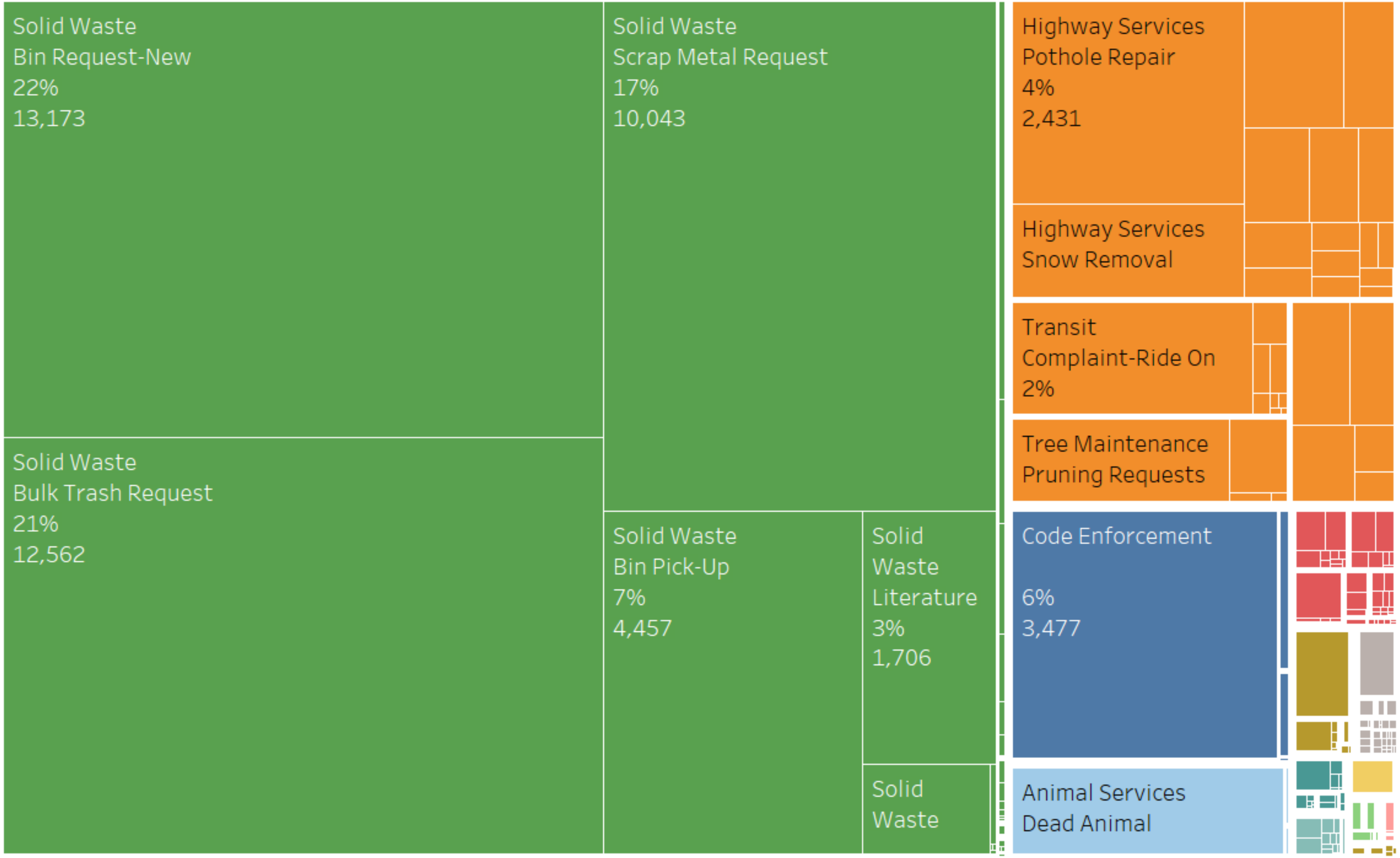
The number of requests generated online was notably higher every month but March.



Source / notes

MC311 Siebel

Treemap: Service Requests Fulfillment in FY16 - Web



This slide shows the distribution and relative popularity of fulfillment service requests via the web.

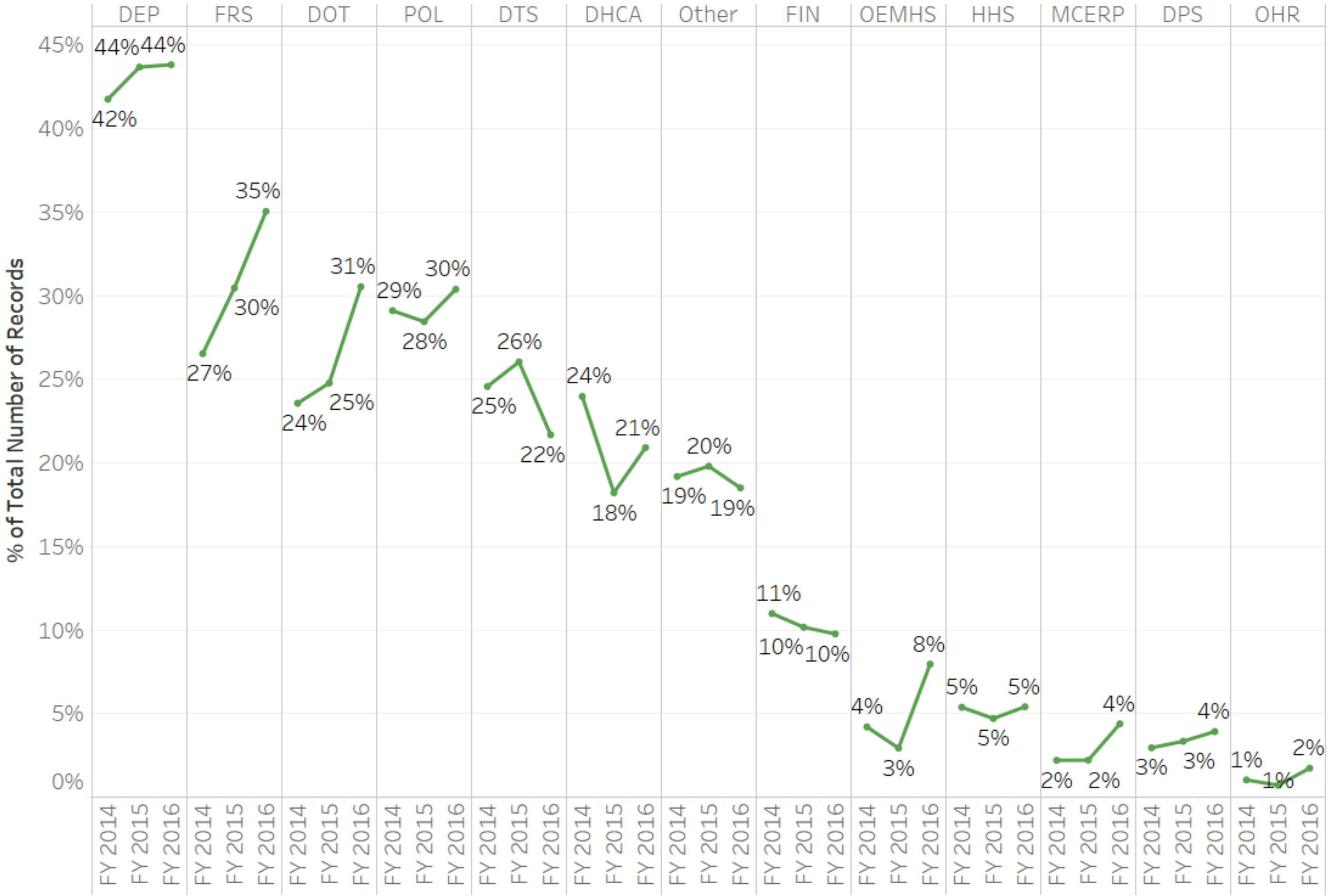
Department

- ■ DEP
- ■ DHCA
- ■ DOT
- ■ DPS
- ■ DTS
- ■ FIN
- ■ FRS
- ■ HHS
- ■ MCERP
- ■ OEMHS
- ■ OHR
- ■ Other
- ■ POL

Source / notes

MC311 open data

Change in Share of Fulfillment SRs Generated via Web



DEP continues to see the highest rate of online requests.

DOT has also seen an increase, particularly for tree related requests as well as a 5 percentage point increase for highway services (from 30% to 35%).

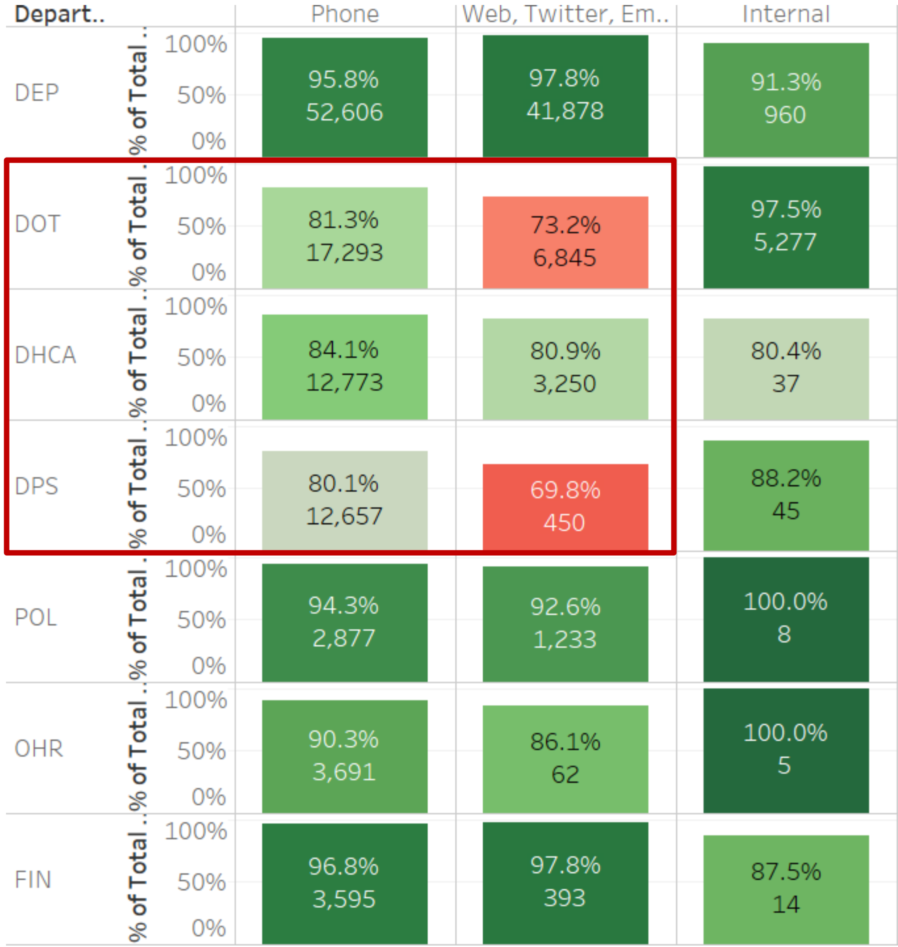
FRS saw a sharp increase in the share of web requests for car seats.

Note that this analysis excludes internally generated requests (i.e. it measures the split between phone vs. web)

Source / notes

MC311 open data (excludes internal requests)

Relative "SLA Met" Performance by Source



Depart..	Phone	Web, Twitter, Em..	Internal
DEP	95.8% 52,606	97.8% 41,878	91.3% 960
DOT	81.3% 17,293	73.2% 6,845	97.5% 5,277
DHCA	84.1% 12,773	80.9% 3,250	80.4% 37
DPS	80.1% 12,657	69.8% 450	88.2% 45
POL	94.3% 2,877	92.6% 1,233	100.0% 8
OHR	90.3% 3,691	86.1% 62	100.0% 5
FIN	96.8% 3,595	97.8% 393	87.5% 14

While DEP demonstrates superior performance on web requests, DOT, DPS, and DHCA (to a lesser extent) produce worse results.

For DEP, these differences are explained by the differences in the kinds of requests made. But DOT and esp. DHCA and DPS demonstrate lower performance for web requests even for the same type of request (for instance, DHCA housing complaints has an SLA performance of 73% web vs. 78% phone, while DPS's contacting a zoning specialist shows 74% web vs. 88%).

These more complicated types of requests may require additional guidance for web users.

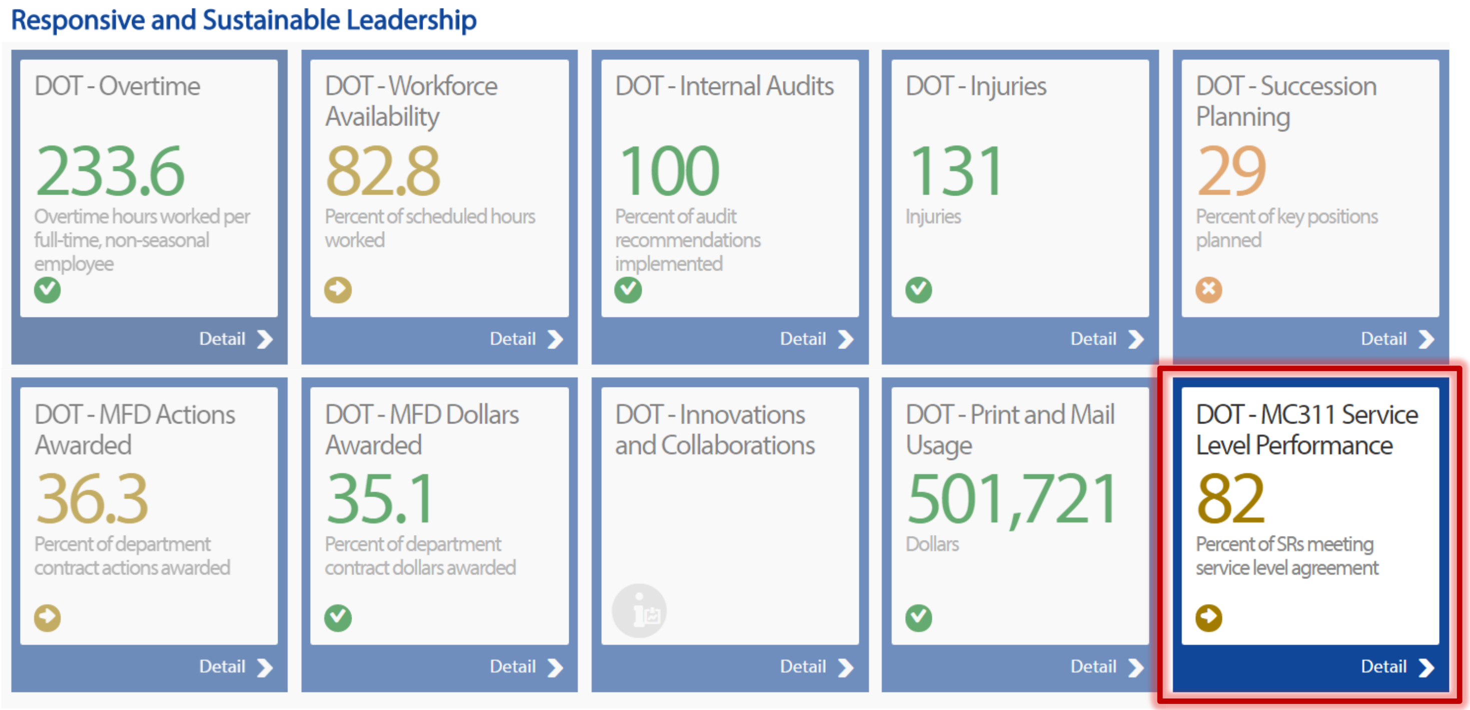
Source / notes

M311 SR Open Data Set

2C. SLA PERFORMANCE

TREND ANALYSIS

New Responsive & Sustainable Leadership Measure



Responsive and Sustainable Leadership

DOT - Overtime
233.6
Overtime hours worked per full-time, non-seasonal employee
✓
Detail ❯

DOT - Workforce Availability
82.8
Percent of scheduled hours worked
➔
Detail ❯

DOT - Internal Audits
100
Percent of audit recommendations implemented
✓
Detail ❯

DOT - Injuries
131
Injuries
✓
Detail ❯

DOT - Succession Planning
29
Percent of key positions planned
✗
Detail ❯

DOT - MFD Actions Awarded
36.3
Percent of department contract actions awarded
➔
Detail ❯

DOT - MFD Dollars Awarded
35.1
Percent of department contract dollars awarded
✓
Detail ❯

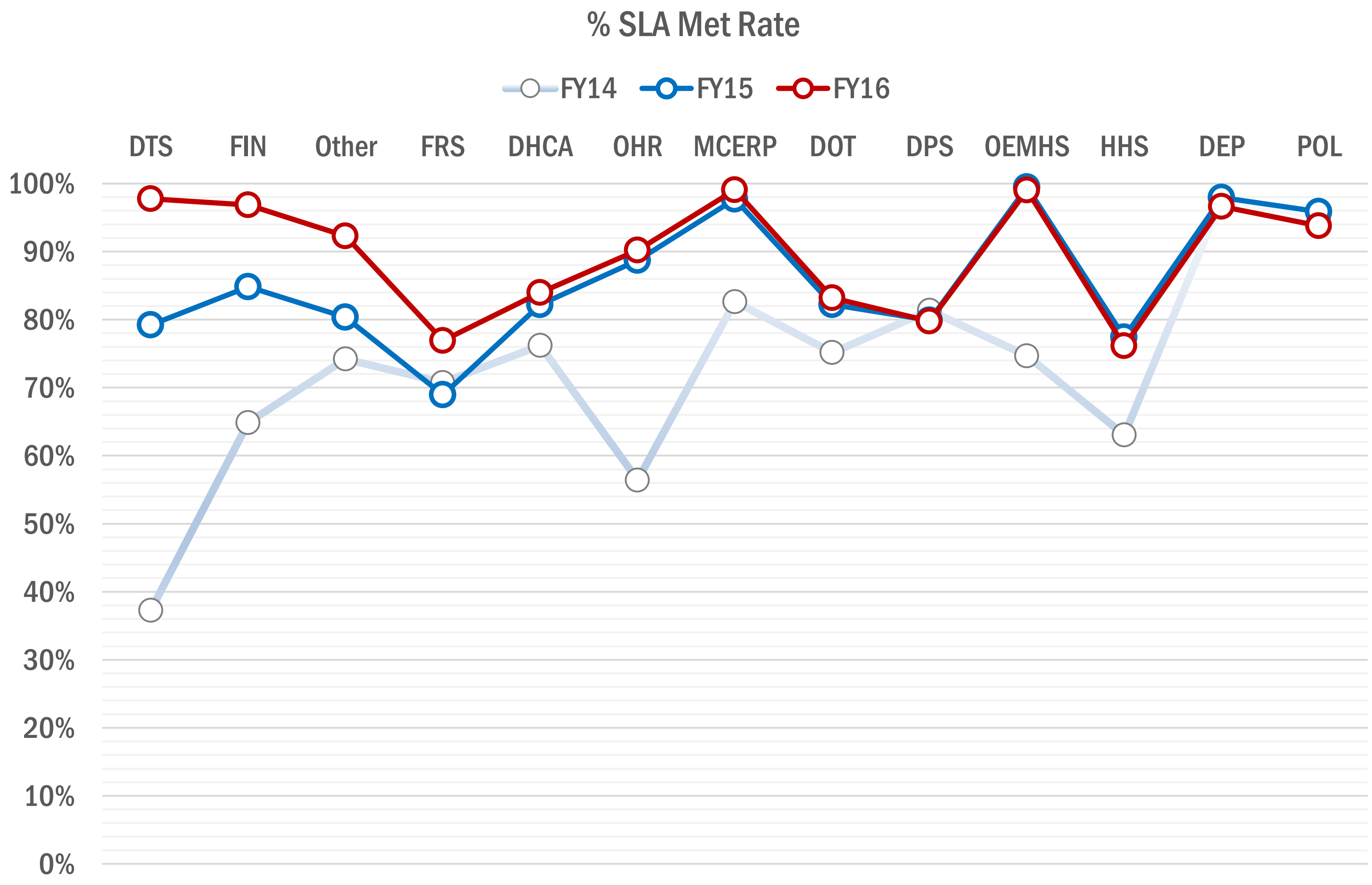
DOT - Innovations and Collaborations
Detail ❯

DOT - Print and Mail Usage
501,721
Dollars
✓
Detail ❯

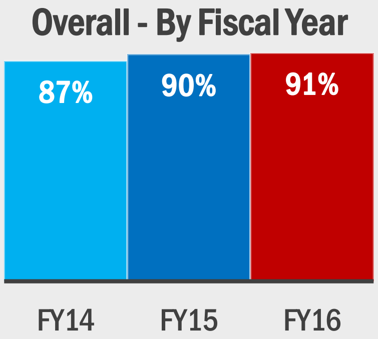
DOT - MC311 Service Level Performance
82
Percent of SRs meeting service level agreement
➔
Detail ❯

CountyStat has fully integrated departmental SLA performance into the Department Performance Plans, including by incorporating MC311 performance measures in the departments' interactive Open Performance dashboards.

Department SLA Performance continues to improve



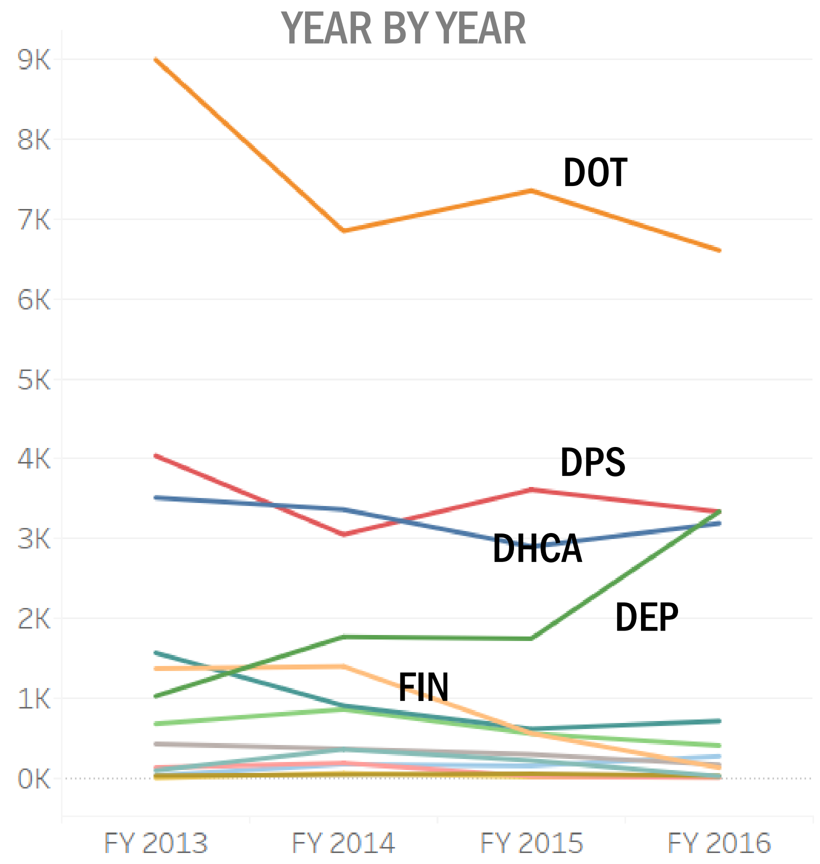
SLA performance saw continued improvement in FY16. DTS, FIN, “Other” (primarily CUPF), and FRS saw improvements of at least 8 percentage points. Only three departments – HHS, DEP, and POL – saw a reduction, of only about 1 percentage point each.

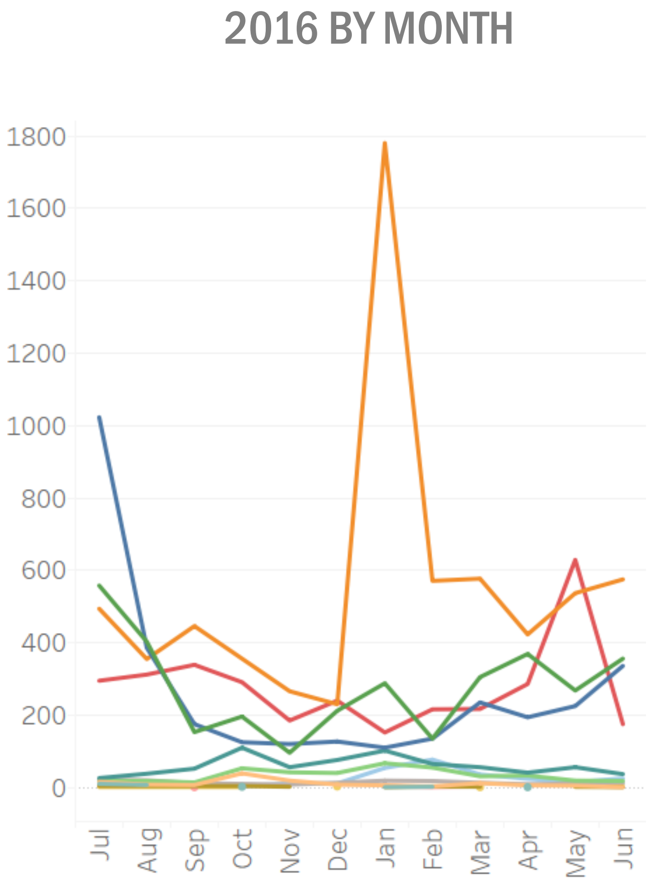


Source / notes

MC311 SR open data set

Total Missed SLAs by Year and Month





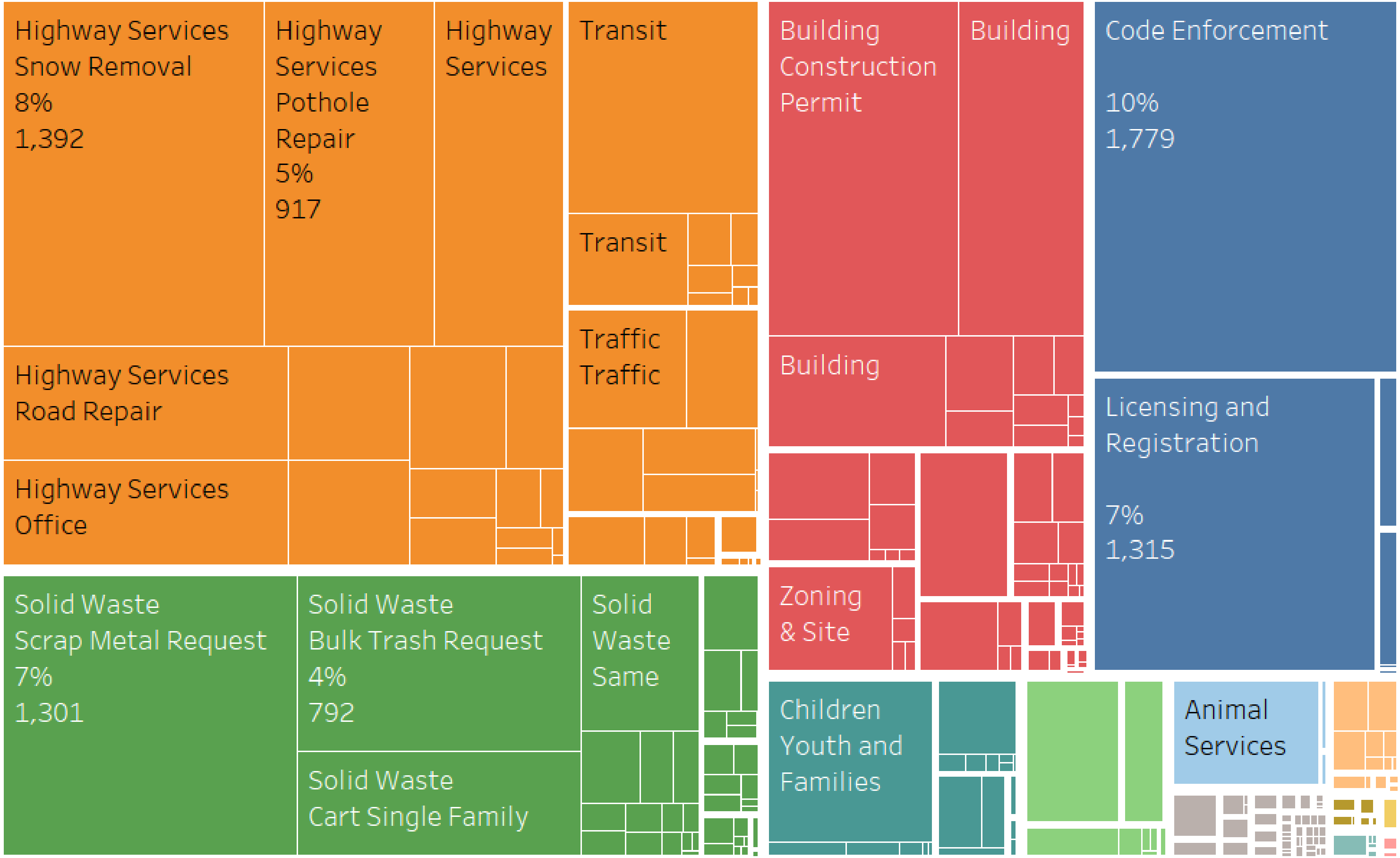
SLA performance has continued to improve overall. This is despite the high number of missed SLAs in January due to Snowzilla.

- 🟩 DEP
- 🟦 DHCA
- 🟧 DOT
- 🟥 DPS
- 🟩 DTS
- 🟧 FIN
- 🟫 FRS
- 🟩 HHS
- 🟥 MCERP
- 🟨 OEMHS
- 🟩 OHR
- ⬜ Other
- 🟦 POL

Source / notes

MC311 SR open data

FY15 Missed SLA by Department and Sub-Area



DOT accounts for the most missed SLAs, followed by DPS and DHCA (Code Enforcement).

Total of missed SLA requests across departments is roughly 18,200.

- 🟩 DEP
- 🟦 DHCA
- 🟧 DOT
- 🟥 DPS
- 🟩 DTS
- 🟧 FIN
- 🟨 FRS
- 🟩 HHS
- 🟥 MCERP
- 🟨 OEMHS
- 🟩 OHR
- ⬜ Other
- 🟦 POL

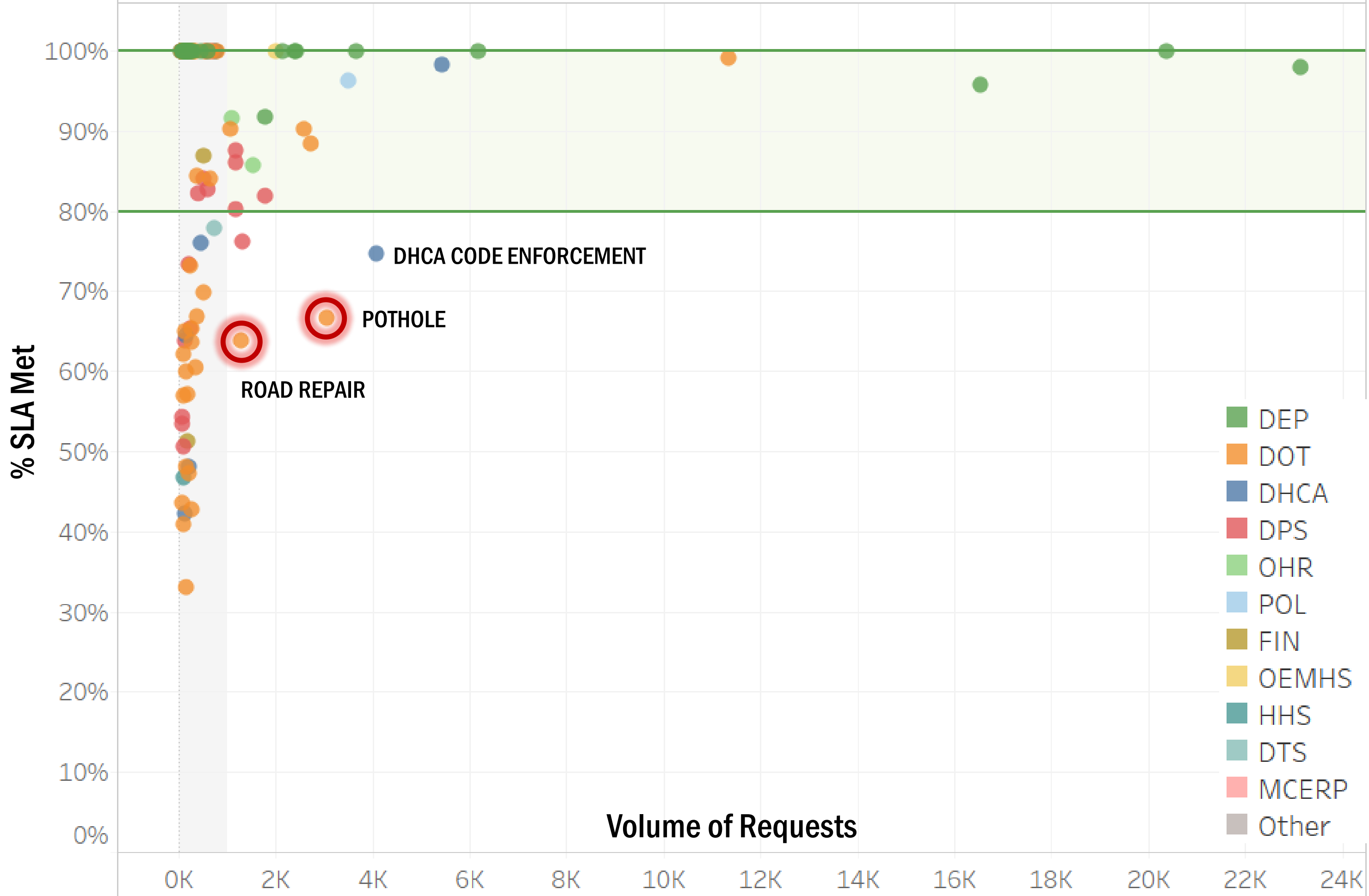
Source / notes

MC311 SR open data

3. DATA-DRIVEN DEPARTMENT DEEP-DIVES

DOT, DPS, DHCA

FY15 SLA Performance vs. Volume



This chart helps identify the biggest opportunities for improving customer service.

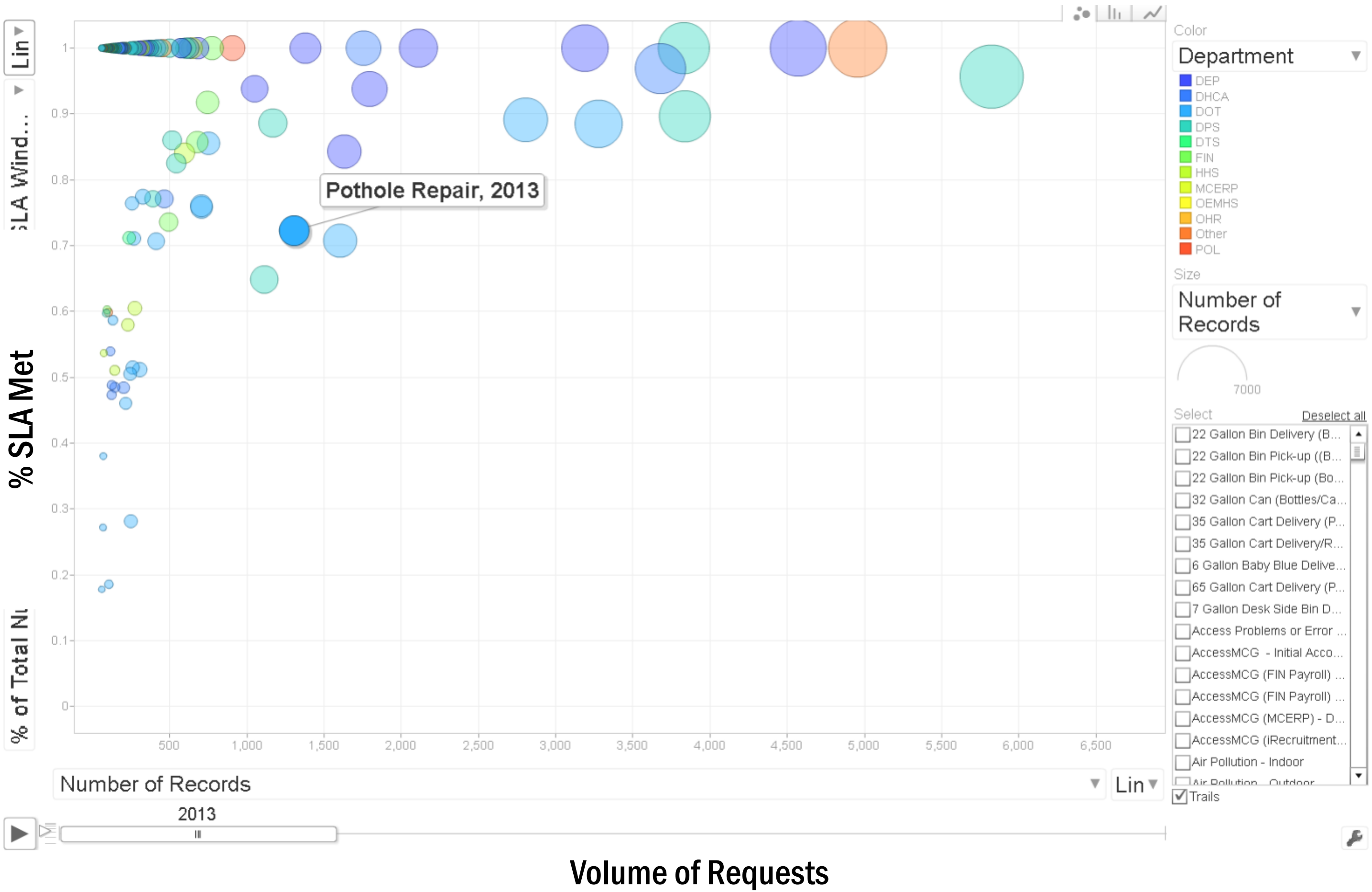
Last year, CountyStat identified Pothole Repair and Road Repair as priority topics for “joint reviews” and deep dives in partnership with MC311 and DOT.

(Note that most poor performing solutions are very low in volume. MC311 addresses this by, for instance, setting up email notifications for departments.)

Source / notes

MC311 SR open data set

FY16 SLA Performance vs. Volume (Click picture for interactive)


Lin
SLA Wind...
% SLA Met
% of Total N
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500
Pothole Repair, 2013
Number of Records
Lin
2013
Volume of Requests
Color
Department
DEP
DHCA
DOT
DPS
DTS
FIN
HHS
MCERP
OEMHS
OHR
Other
POL
Size
Number of Records
7000
Select
Deselect all
☐ 22 Gallon Bin Delivery (B...
☐ 22 Gallon Bin Pick-up ((B...
☐ 22 Gallon Bin Pick-up (Bo...
☐ 32 Gallon Can (Bottles/Ca...
☐ 35 Gallon Cart Delivery (P...
☐ 35 Gallon Cart Delivery/R...
☐ 6 Gallon Baby Blue Delive...
☐ 65 Gallon Cart Delivery (P...
☐ 7 Gallon Desk Side Bin D...
☐ Access Problems or Error ...
☐ AccessMCG - Initial Acco...
☐ AccessMCG (FIN Payroll) ...
☐ AccessMCG (FIN Payroll) ...
☐ AccessMCG (MCERP) - D...
☐ AccessMCG (iRecruitment...
☐ Air Pollution - Indoor
☐ Air Pollution - Outdoor
☑ Trails

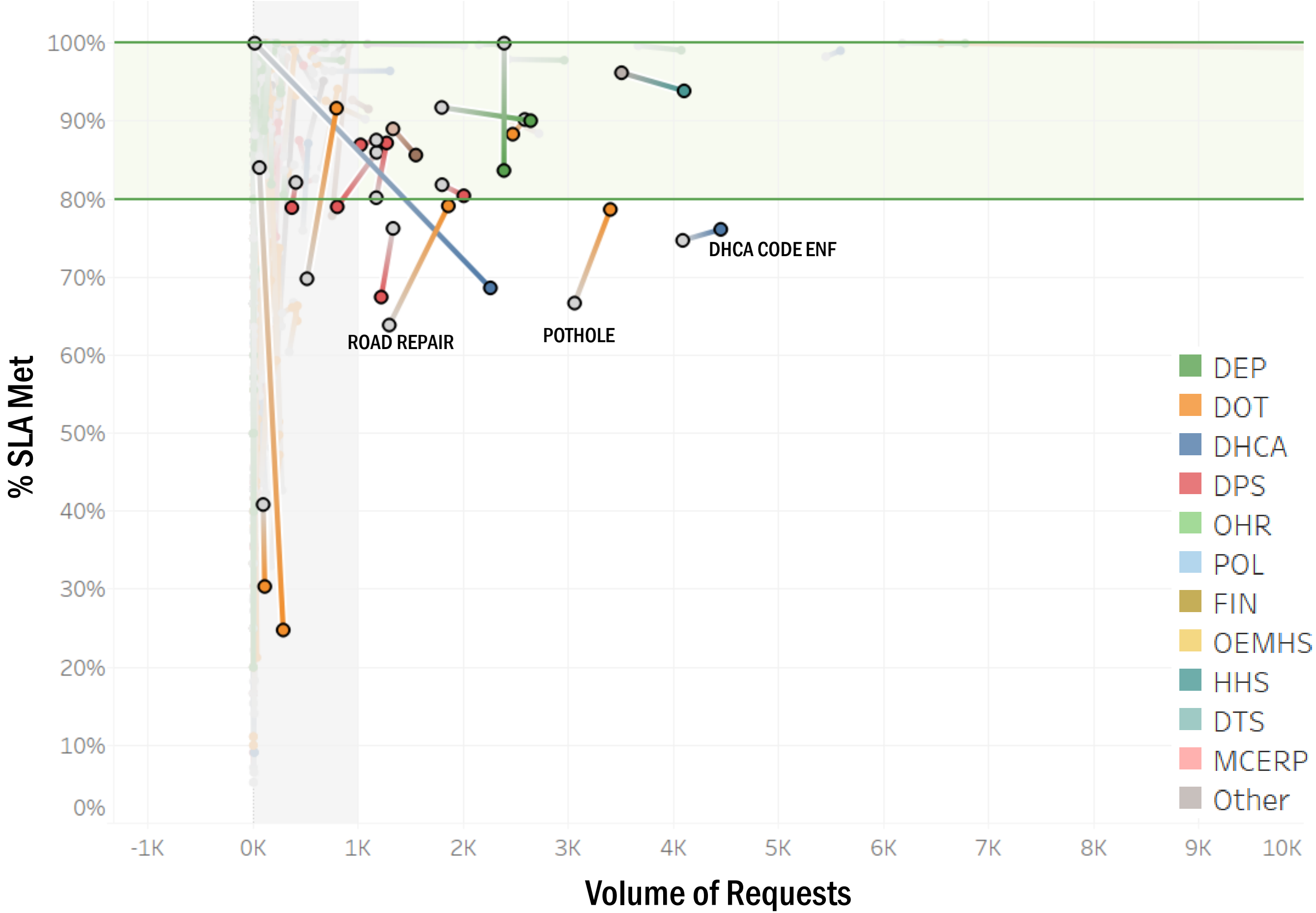
Clicking on the image opens an interactive chart that shows the movement of SLA performance vs. volume over time.

Source / notes

MC311 SR open data set

FY16 SLA Performance vs. Volume (Comparison to FY15)

CountyStat
Performance Measurement and Management



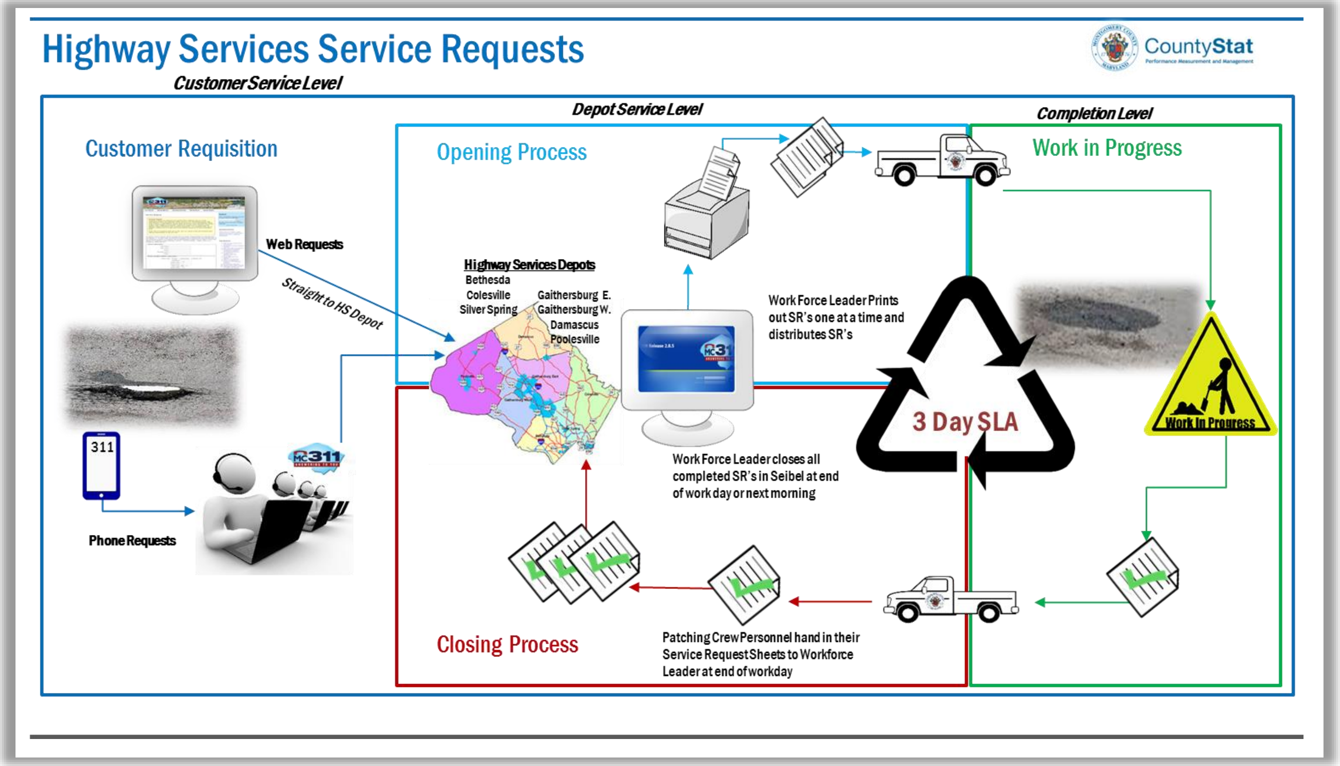
This graphic shows movement between FY15 and FY16. Note that DOT saw notable improvements in both Road Repair and Pothole Repair. DHCA Code Enforcement also improved slightly.

The other highlighted movements will be discussed in a later slide.

Source / notes

MC311 SR open data set

Analysis of Highway Services SRs



Highway Services Service Requests

Customer Service Level

Depot Service Level

Completion Level

Customer Requisition

Opening Process

Work in Progress

Web Requests

Straight to HS Depot

Highway Services Depots
Bethesda
Colesville
Silver Spring
Gaithersburg E.
Gaithersburg W.
Damascus
Poolesville

Work Force Leader Prints out SR's one at a time and distributes SR's

3 Day SLA

Phone Requests

Work Force Leader closes all completed SR's in Seibel at end of work day or next morning

Closing Process

Patching Crew Personnel hand in their Service Request Sheets to Workforce Leader at end of workday

MCDOT Highway Services, MC311, and CountyStat collaborated to assess opportunities for improving SLA performance. This work included process analysis, as depicted in the screenshot to the left.

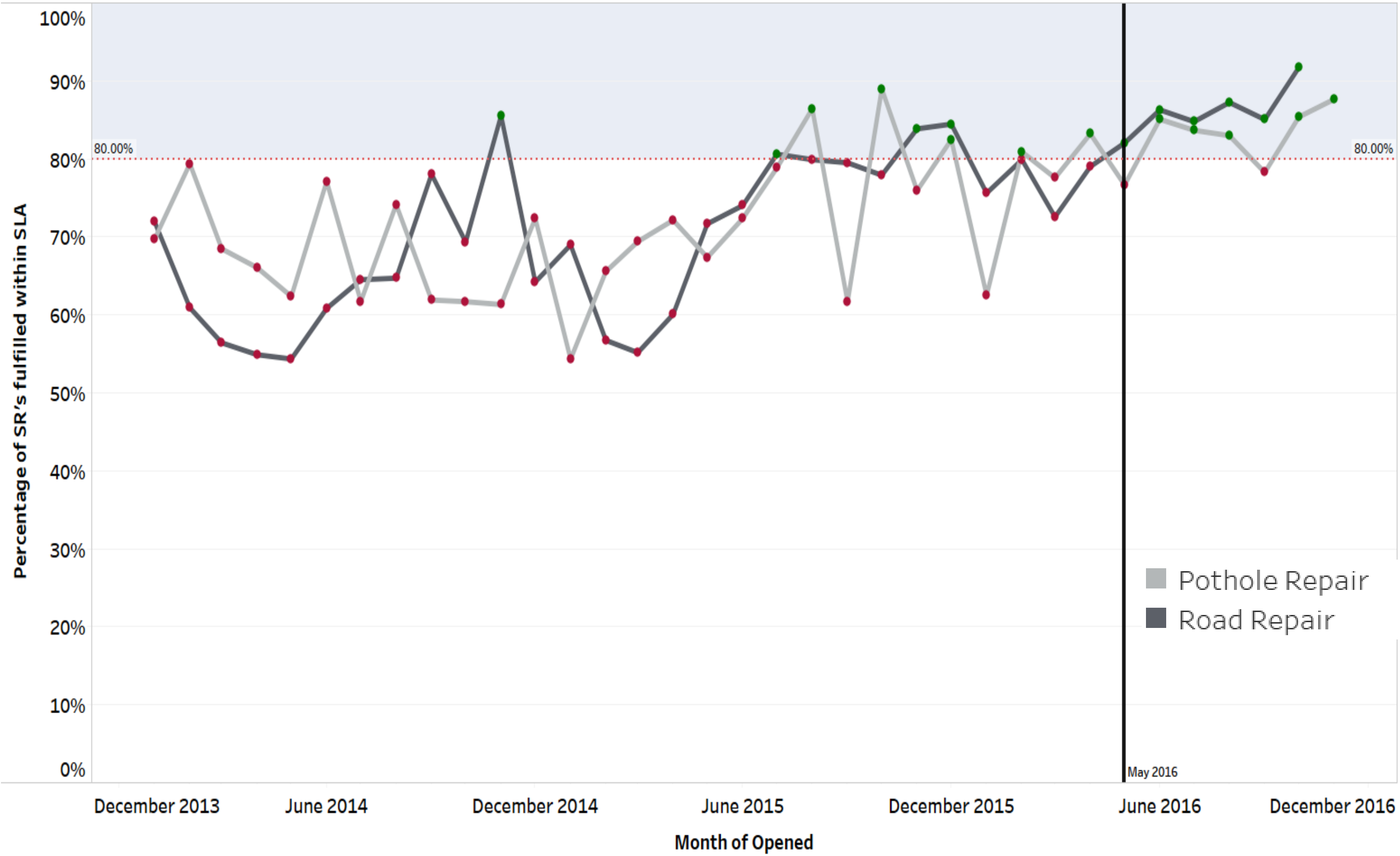
Performance has notably improved and continued through FY17 (YTD).

CountyStat and MC311 will use this as a model for future "joint action reviews," based on priorities set at the MC311 annual review meeting.

Source / notes

CountyStat analysis

Highway Services Performance: Pothole and Road Repair



Consistent improvement has been seen in the performance of Highway Services Road Repair by all depots .

Highway services had its best performing month in October/November in terms of the average time to close Pothole/Road Repair Service Requests, at 1.4 and 2.2 days respectively.

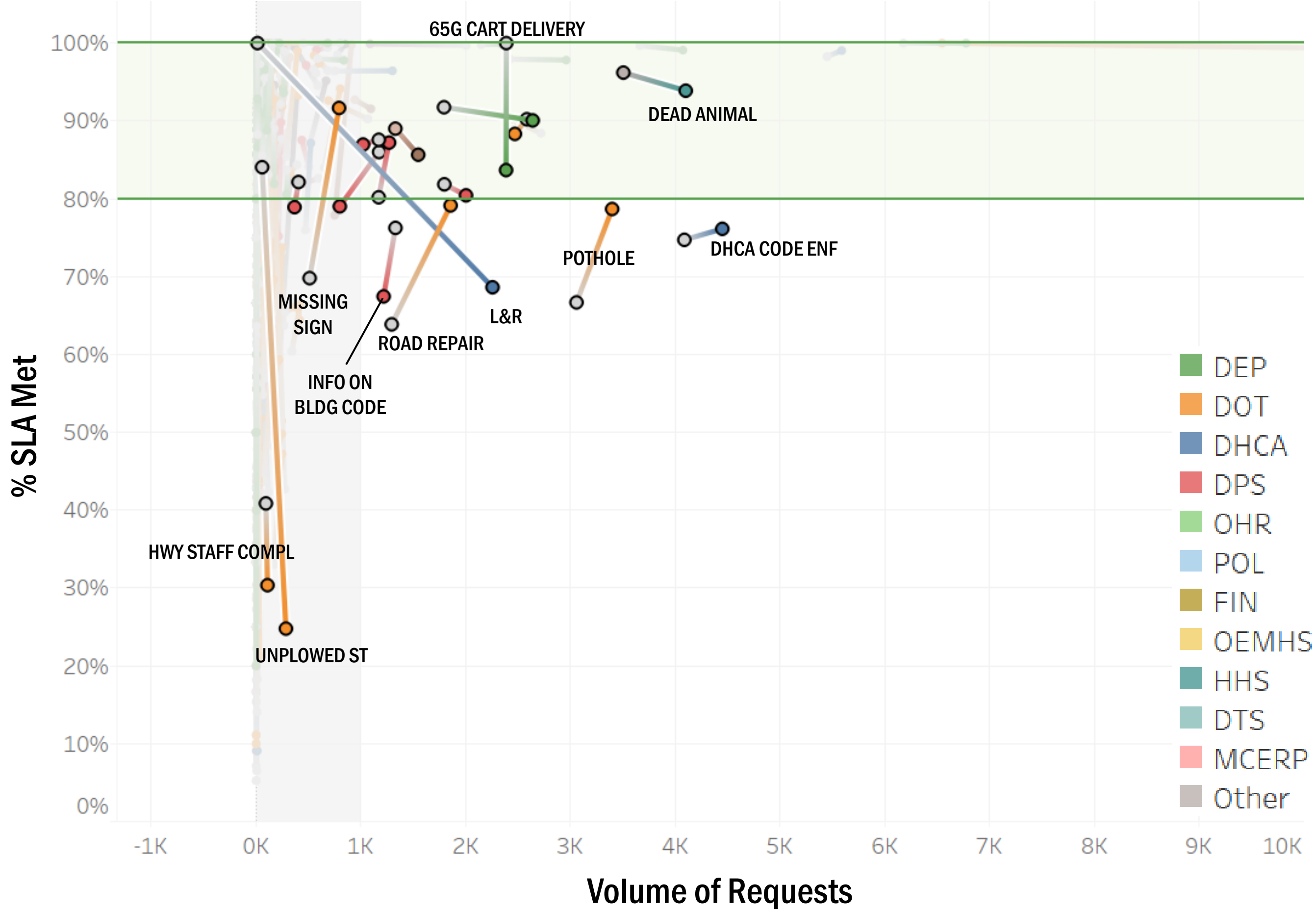
Source / notes

MC311 Siebel CRM

4. FY17 BUSINESS / STRATEGIC PRIORITIES

DISCUSSION

FY16 SLA Performance vs. Volume (Comparison to FY15)



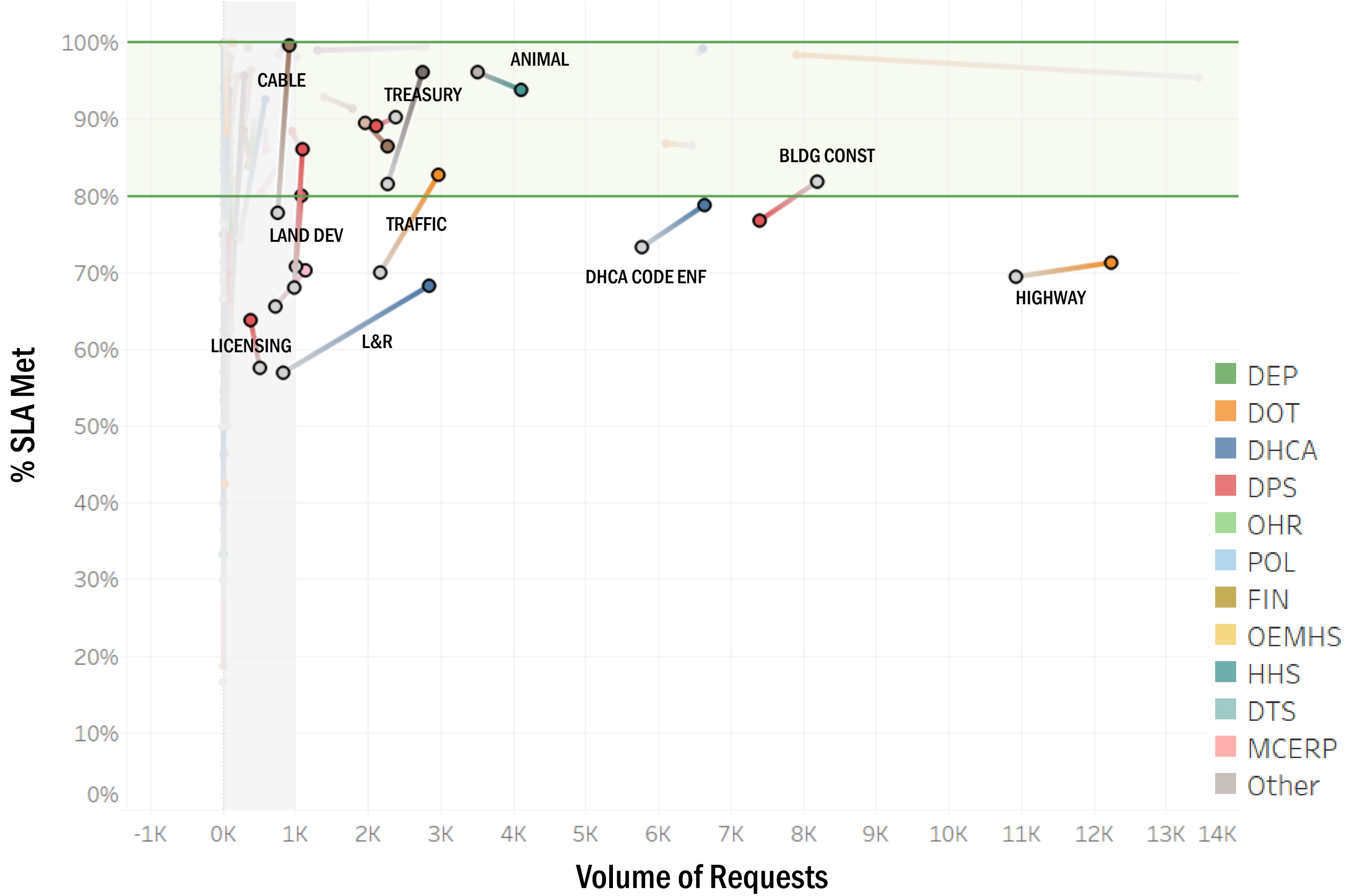
This graphic again shows changes in volume and performance for specific solutions between FY15 and FY16.

- DHCA Licensing and Regulations increased the rental licensing fee for the first time in a decade, resulting in high volume of calls. CountyStat will continue to monitor their SLA and evaluate the need for recalibration.
- DOT struggled with snow related requests, but this was due in part to a highly unusual snow storm. Highway staff complaint requires attention.
- DEP experienced a one-off issue with cart delivery (i.e. timely closure after delivery and “Bin-nami”).
- DPS saw a continued drop in applicable building code info. This has since been split into two separate requests, with much improved performance.

Source / notes

MC311 SR open data set

FY16 SLA Performance vs. Volume – By Area



This graphic also shows changes btw. FY15 to FY16, but does so for "areas," which represent a higher level than an individual solution—i.e. areas often correspond to divisions. Observations include:

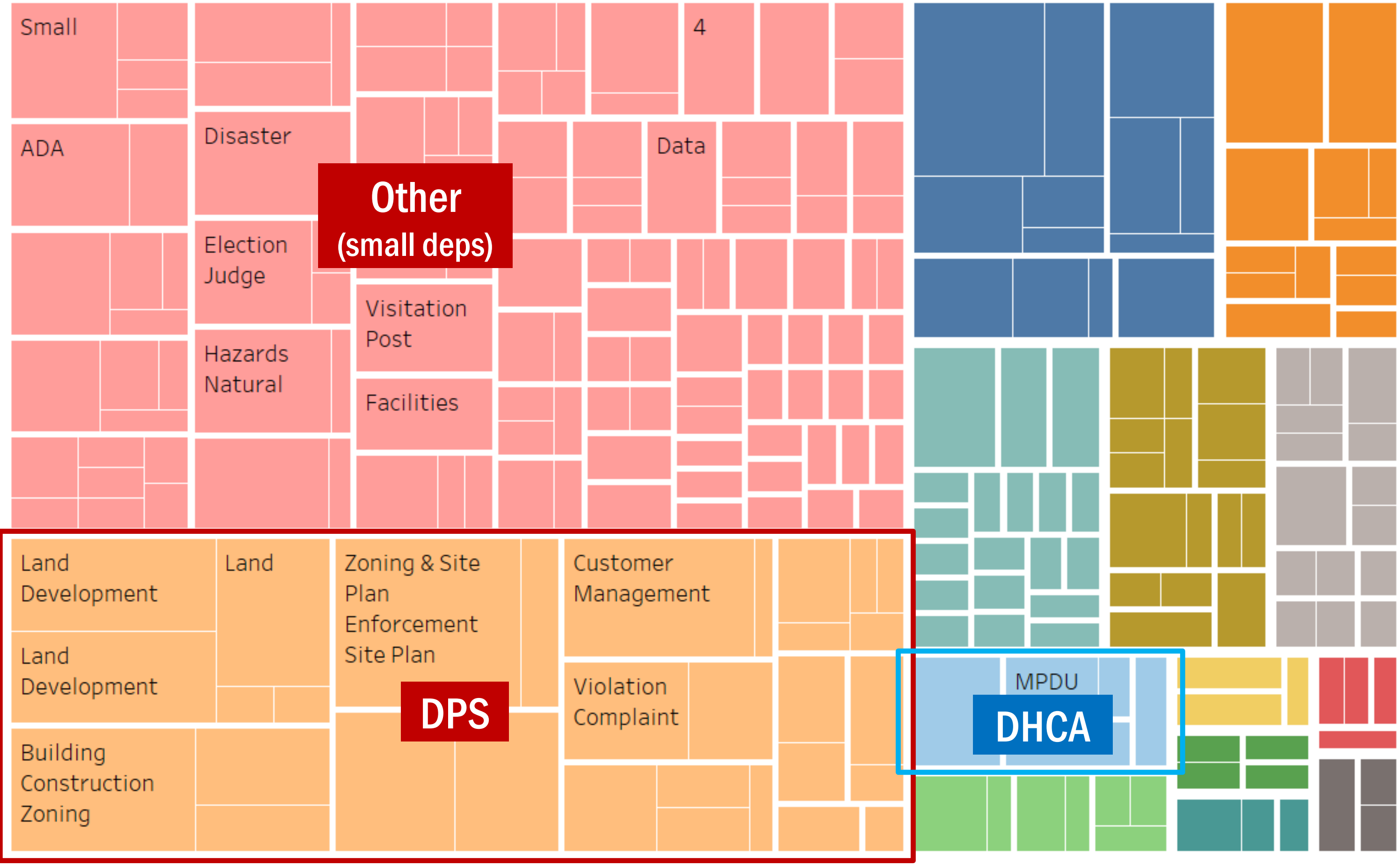
- DOT highway services is a notable outlier, but is improving despite challenges in meeting snow plowing related requests.
- DHCA code enforcement has improved, but continues to sit below 80%.
- DPS has a number of areas that remain below 80%.

Source / notes

MC311 SR open data set

Number of Low Volume Solutions by Department

CountyStat
Performance Measurement and Management



This chart shows the number of solutions by department that had 3 or fewer request per month in FY16.

Note that DPS has a relatively high number of such requests, second only to “other,” which encompasses most of the smaller county departments.

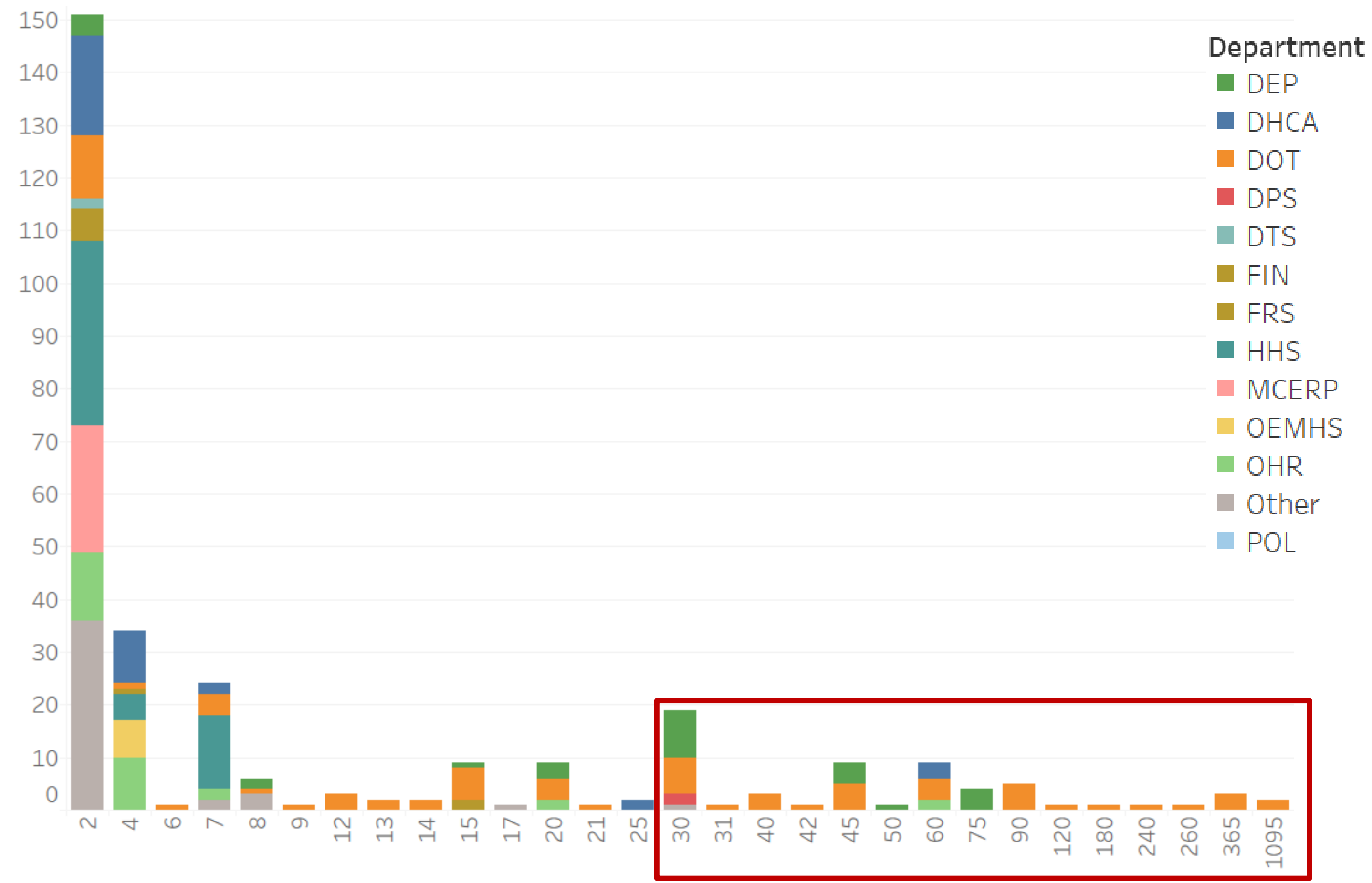
DHCA, by contrast, has very few low-volume services.

A large number of low solutions may lead to additional complexity.

Source / notes

MC311 SR open data

Distribution of SLA Time Frames



Complex solutions, such as those related to code enforcement, tend to have long SLAs due to the uncertainty in the level of effort required at the start of the intake process.

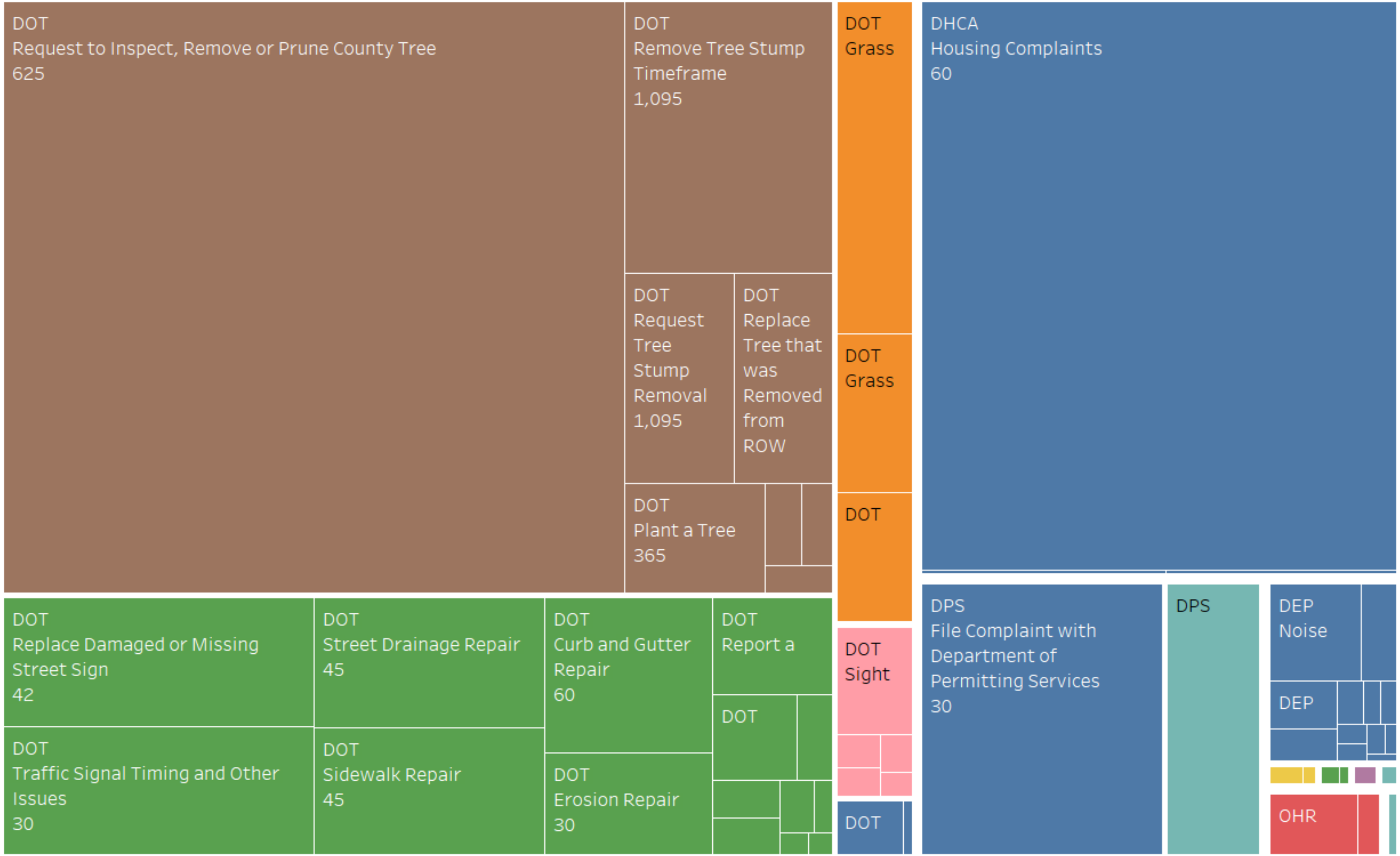
59 active solutions had an SLA of 30 or more days.
Active is defined as having at least 5 fulfillment service requests in FY16.

Montgomery County has a higher reliance on long SLAs compared to other 311 systems as the County tracks time to full completion rather than time to respond.

Source / notes

MC311 SR open data

Solutions with 30+ Day SLA by Department and Type



This treemap shows the 59 active solutions with 30+ day SLA. The size of the box corresponds to the volume of resident requests. The number below the title shows the current SLA.

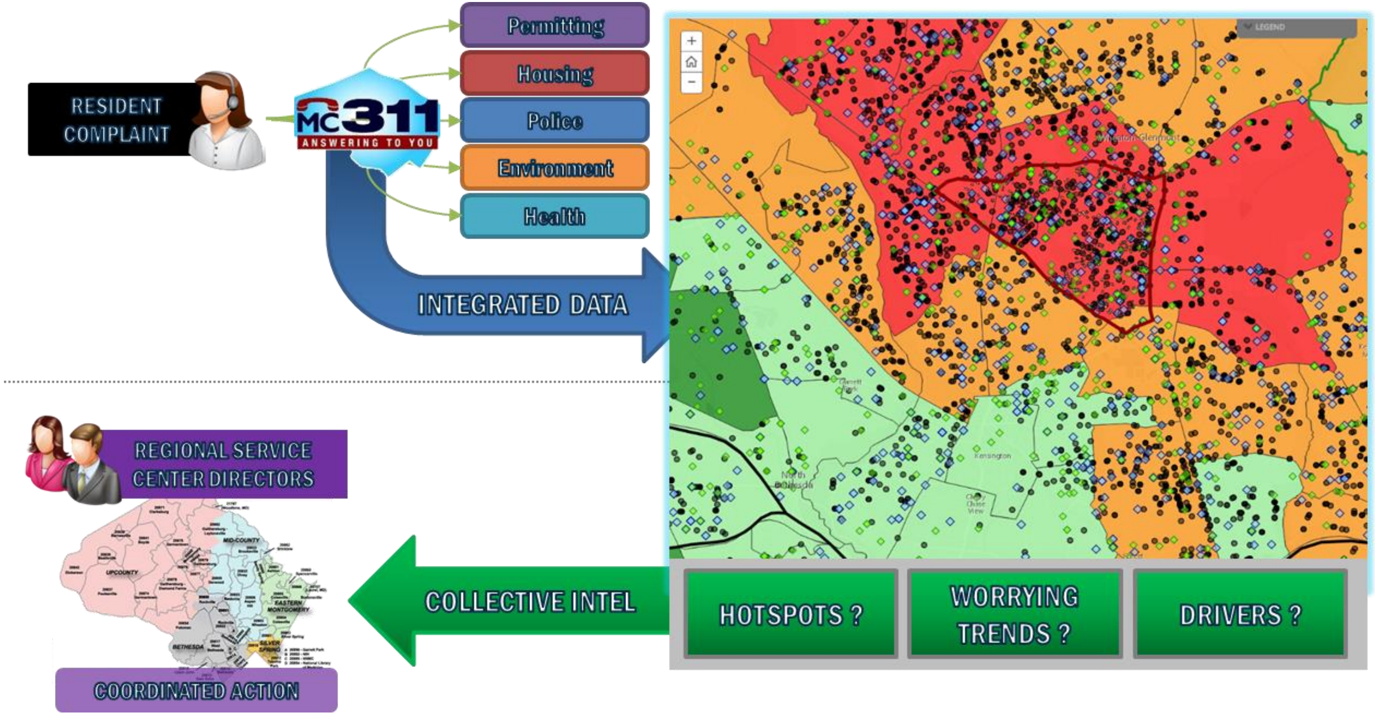
Note that code enforcement and trees account for a large share of these requests.

- 🟦 Code Enforcement or Inspection
- 🟧 Damage/Restitution
- 🟥 HR
- 🟦 Information
- 🟩 Infrastructure Repair
- 🟨 Other
- 🟪 Permit
- 🟥 Study
- 🟫 Trees

Source / notes

MC311 SR open data

Preliminary ConOps: Code Enforcement"Stat"



RESIDENT COMPLAINT

MC311 ANSWERING TO YOU

Permitting

Housing

Police

Environment

Health

INTEGRATED DATA

HOTSPOTS ?

WORRYING TRENDS ?

DRIVERS ?

COLLECTIVE INTEL

REGIONAL SERVICE CENTER DIRECTORS

COORDINATED ACTION

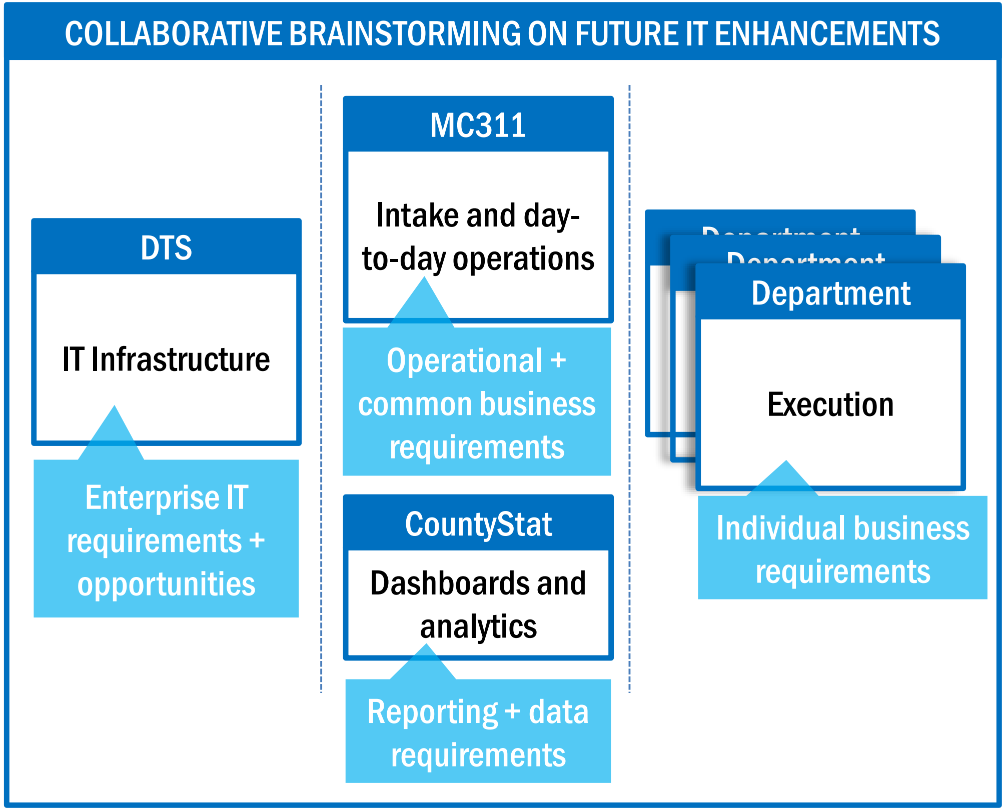
LEGEND
Wheaton-Glenmont
Kensington
North Bethesda
Chevy Chase View
UPCOUNTY
MID-COUNTY
EASTERN MONTGOMERY
BETHESDA
SILVER SPRING

A CY17 focus on code enforcement will complement CountyStat's planned support to "neighborhood action teams." The image to the left shows a preliminary concept of operations for CountyStat's analytical support in this space.

One of the aims of this focus on code enforcement is to provide a greater level of granularity in how performance is tracked at different stages in the process (i.e. not just time to completion but also time to first response, etc.).

Exploring scenarios for future infrastructure enhancements

COLLABORATIVE BRAINSTORMING ON FUTURE IT ENHANCEMENTS



DTS
IT Infrastructure
Enterprise IT requirements + opportunities

MC311
Intake and day-to-day operations
Operational + common business requirements

CountyStat
Dashboards and analytics
Reporting + data requirements

Department
Execution
Individual business requirements

UNIVERSE OF OPTIONS

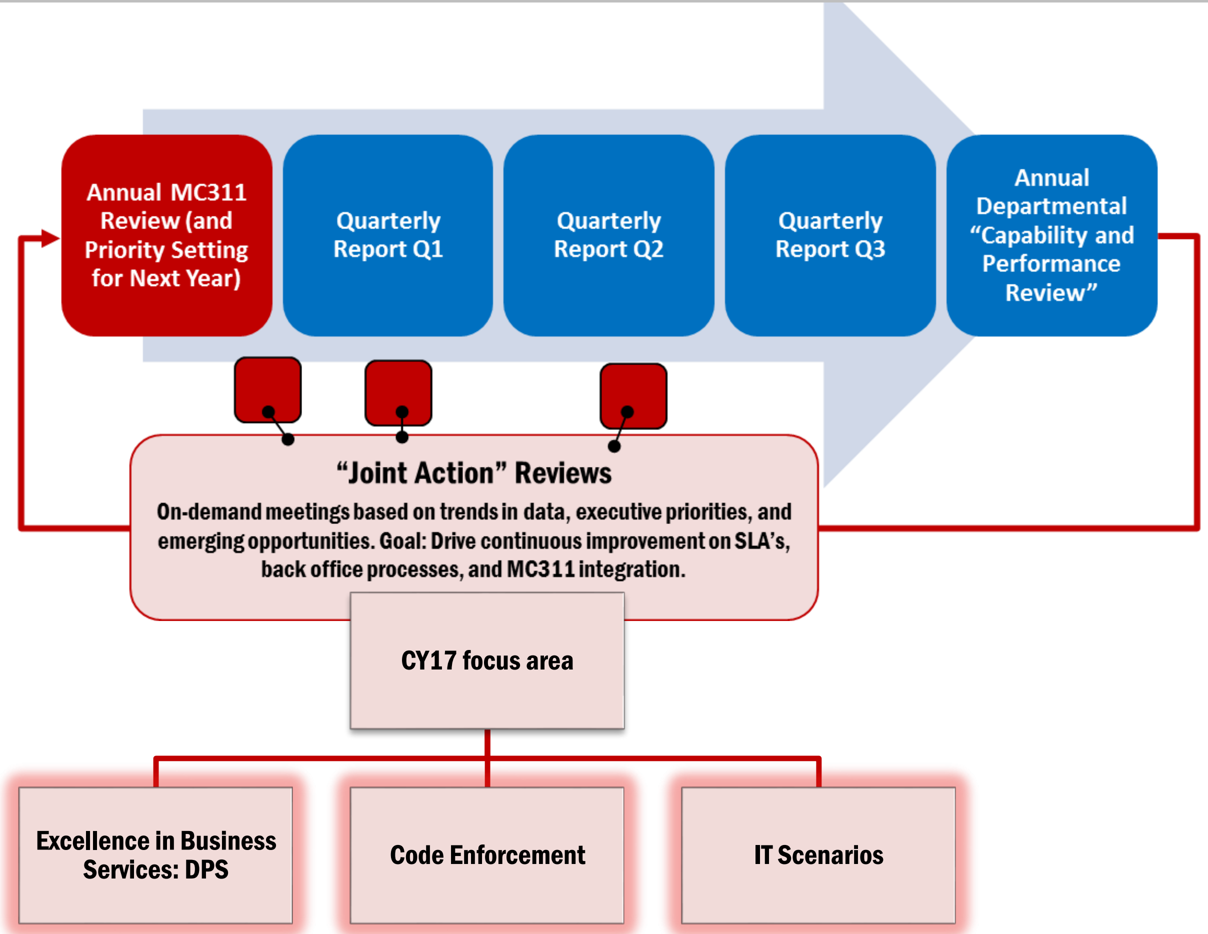
- Pictures / attachments
- Additional system-to-system integrations
- Upfront address validation
- Mobile app - residents
- Mobile app – field staff
- Cloud infrastructure
- Online chat

It is important for the County to collectively look ahead and think about the continued evolution of the MC311 platform to keep up with best practice and new innovations. Accordingly, CountyStat proposes to convene a collaborative effort to identify possible options, roadmaps, and scenarios for the intermediate to long term.

By taking a coordinated approach, the County can package disparate departmental interests and business requirements into common enterprise options.

Of note, County Attorney also has an interest in accelerated platform upgrades.

CY17 Priorities



Annual MC311 Review (and Priority Setting for Next Year)

Quarterly Report Q1

Quarterly Report Q2

Quarterly Report Q3

Annual Departmental "Capability and Performance Review"

"Joint Action" Reviews

On-demand meetings based on trends in data, executive priorities, and emerging opportunities. Goal: Drive continuous improvement on SLA's, back office processes, and MC311 integration.

CY17 focus area

Excellence in Business Services: DPS

Code Enforcement

IT Scenarios

Based on the preceding analysis, this slide lists proposed priorities for CY2017 reviews and discussions.

FOLLOW UP ITEM: Joint Action Reviews with DPS.

FOLLOW UP ITEM: Code Enforcement deep-dive.

FOLLOW UP ITEM: Collaborative brainstorming on IT roadmap and scenarios.

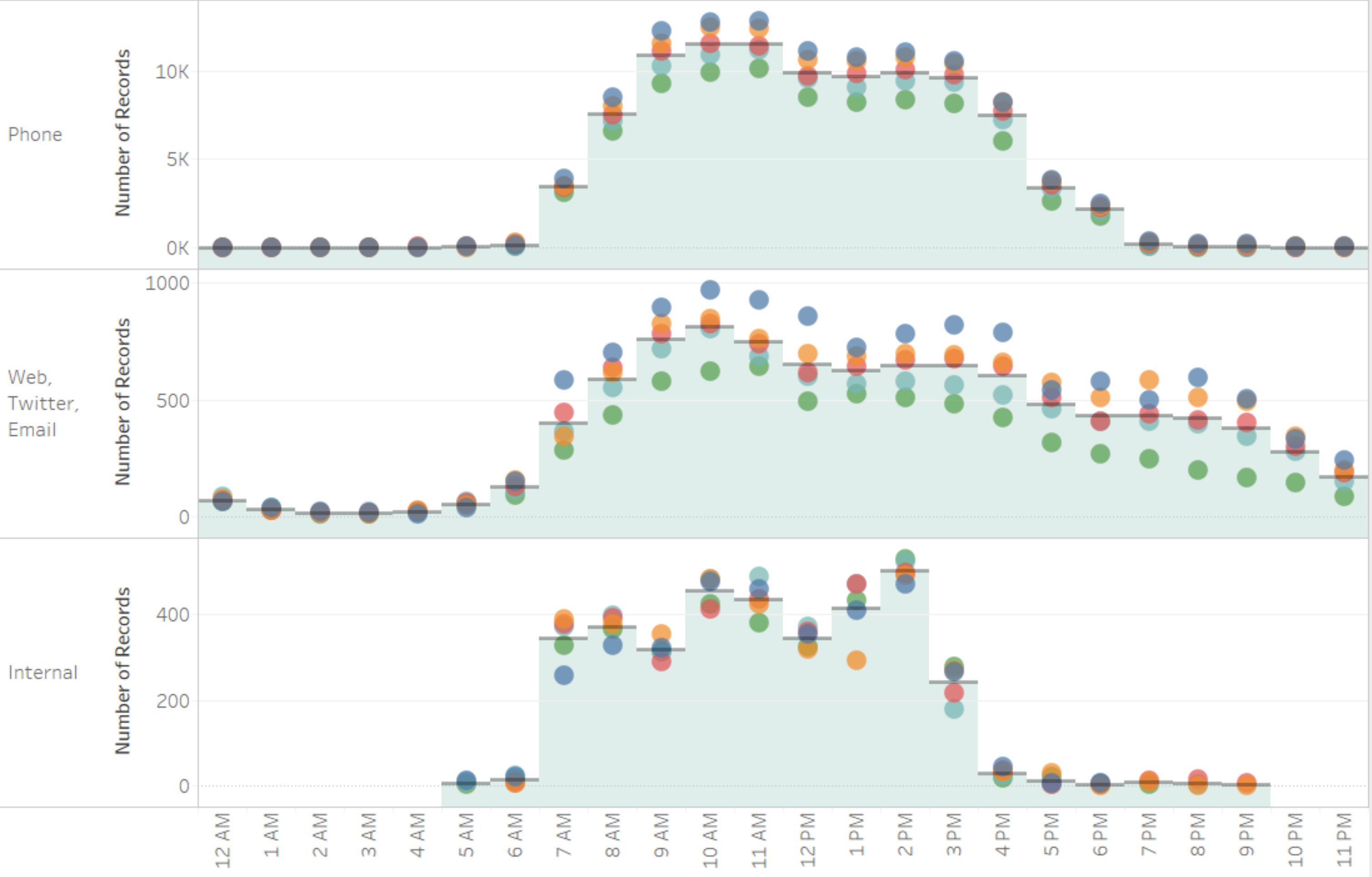
Additional short-term actions identified through discussions include:

FOLLOW UP ITEM: Consumer Protection use of direct calls vs. MC311.

FOLLOW UP ITEM: Examine performance of DOT Highway Services complaints.

APPENDIX: ADDITIONAL CALL CENTER AND SLA SLIDES

SR (GI and Fulfillment) by Day of the Week – by Source



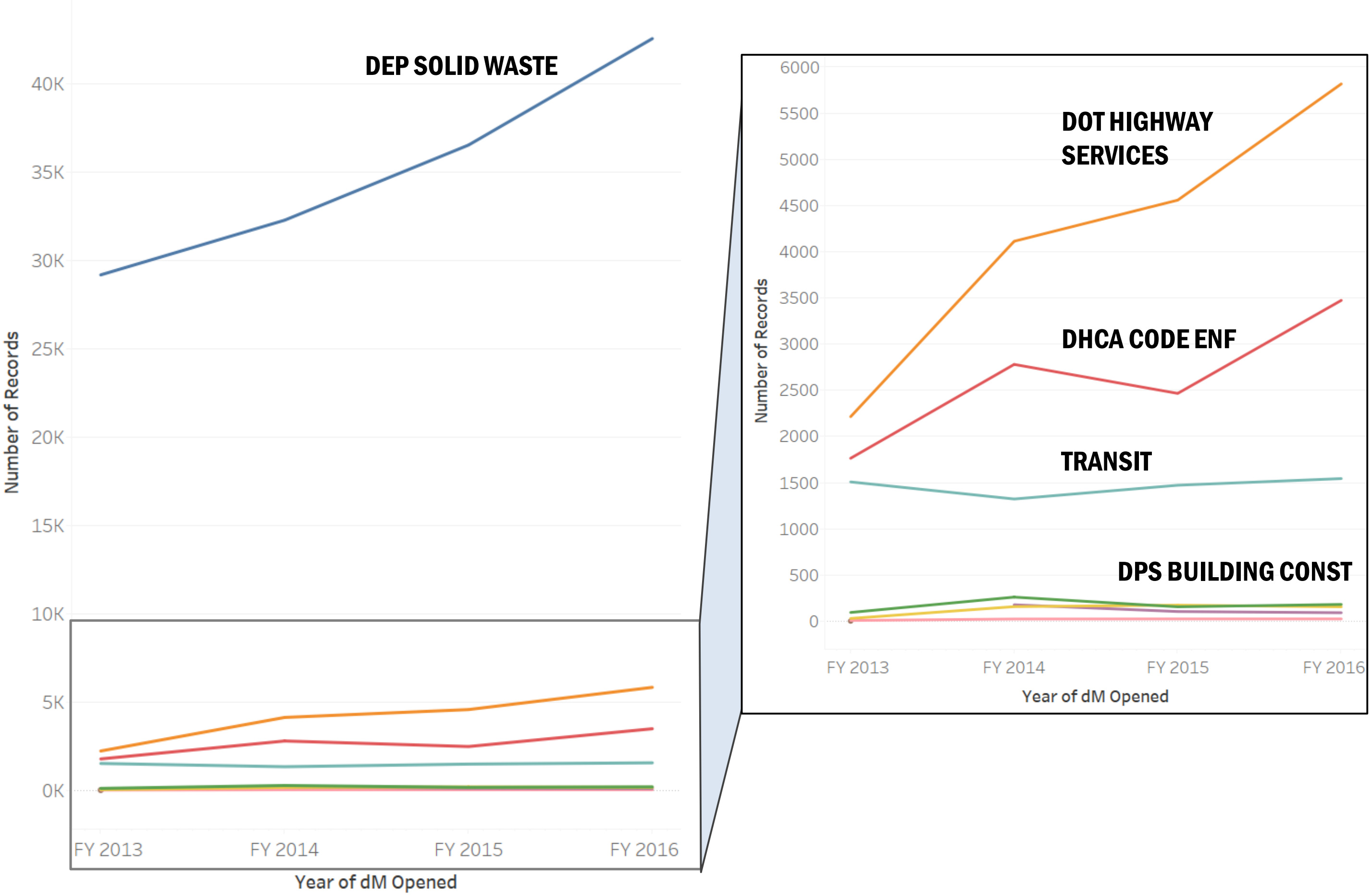
This slide shows the volume of requests received by time of day, day of the week, and source.

FY16 largely followed historic trends.

Source / notes

MC311 Siebel CRM

SRs from Web over Time (Top 8 Areas)



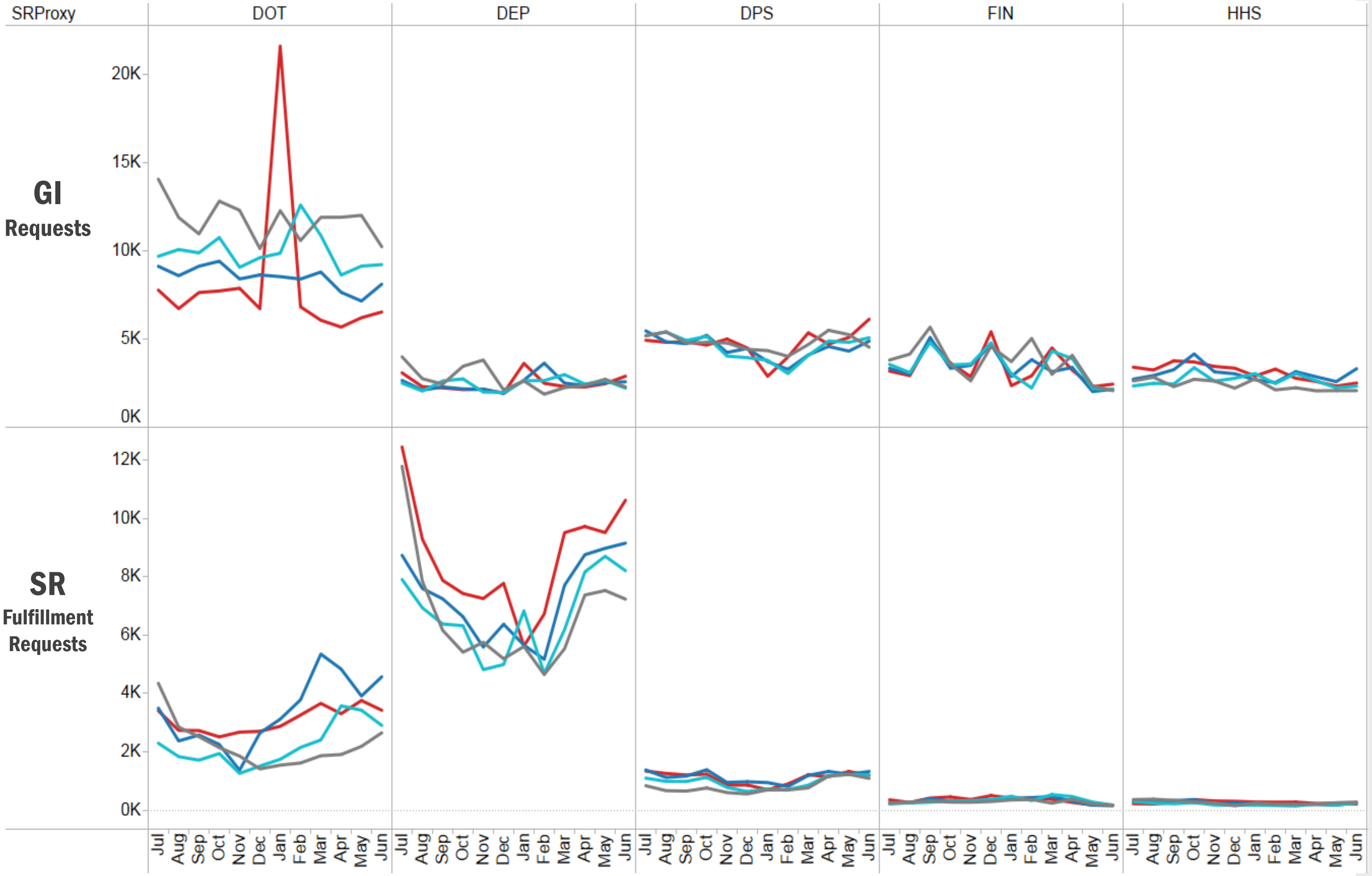
Solid Waste dominates and continues to grow. However, DOT highway services and DHCA code enforcement have also seen a significant uptick in web requests.

- 🟦 Solid Waste
- 🟧 Highway Services
- 🟥 Code Enforcement
- 🟦 Transit
- 🟩 Building Construction
- 🟨 State of Maryland
- 🟪 Treasury
- 🟥 Children Youth and Families

Source / notes

MC311 Siebel CRM

Change over Time by Department



This chart shows the seasonality of requests for the highest volume departments as well as the changes in volume over time.

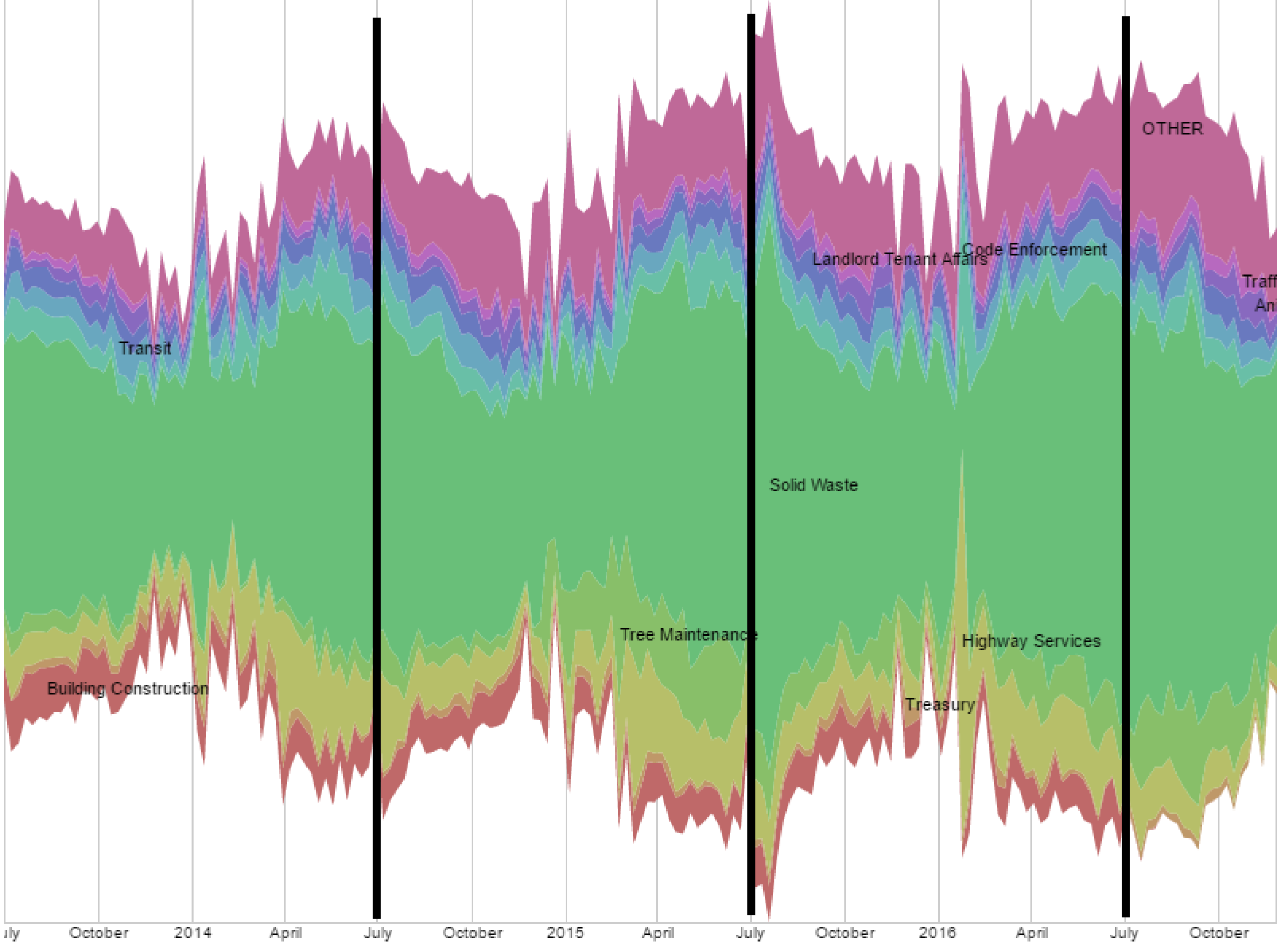
- ▨ FY 2013
- ▨ FY 2014
- ▨ FY 2015
- ▨ FY 2016

Source / notes

MC311 Siebel CRM data

Note that some of the fluctuation from FY13 to FY14 is due to the way complaints and referrals are tracked.

SR Fulfillment Volume Over Time (by week)



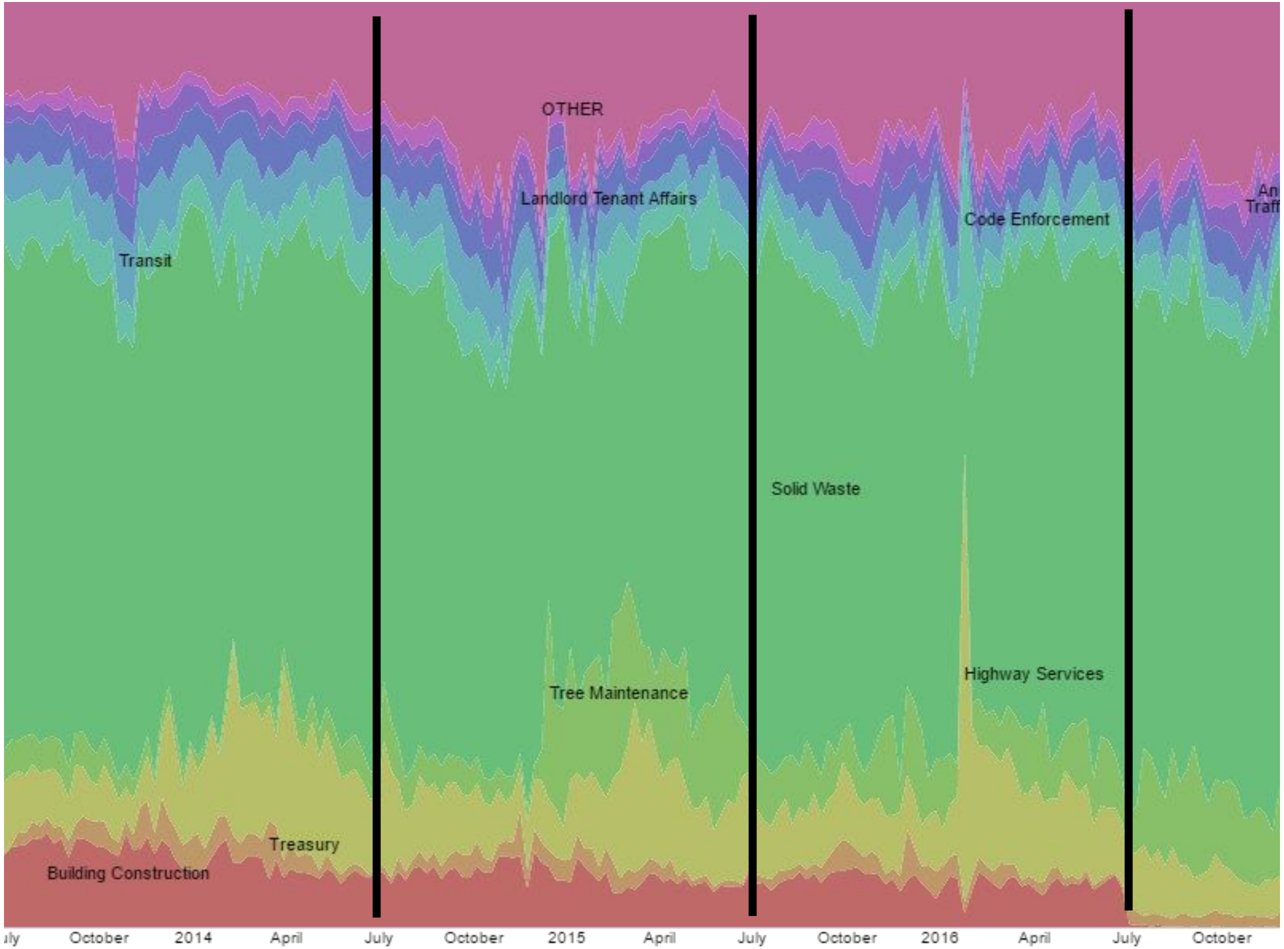
This image shows the seasonality of service requests (by area).

Animal Services	#8869bf
Building Construction	#bf6969
Code Enforcement	#69bfa7
Highway Services	#b7bf69
Landlord Tenant Affairs	#6979bf
OTHER	#bf6998
Solid Waste	#69bf79
Traffic	#b769bf
Transit	#69a7bf
Treasury	#bf9869
Tree Maintenance	#88bf69

Source / notes

MC311 Siebel CRM

SR Fulfillment Volume Over Time: Share



This slide normalizes the preceding chart to show changes in the share of all requests by area over time.

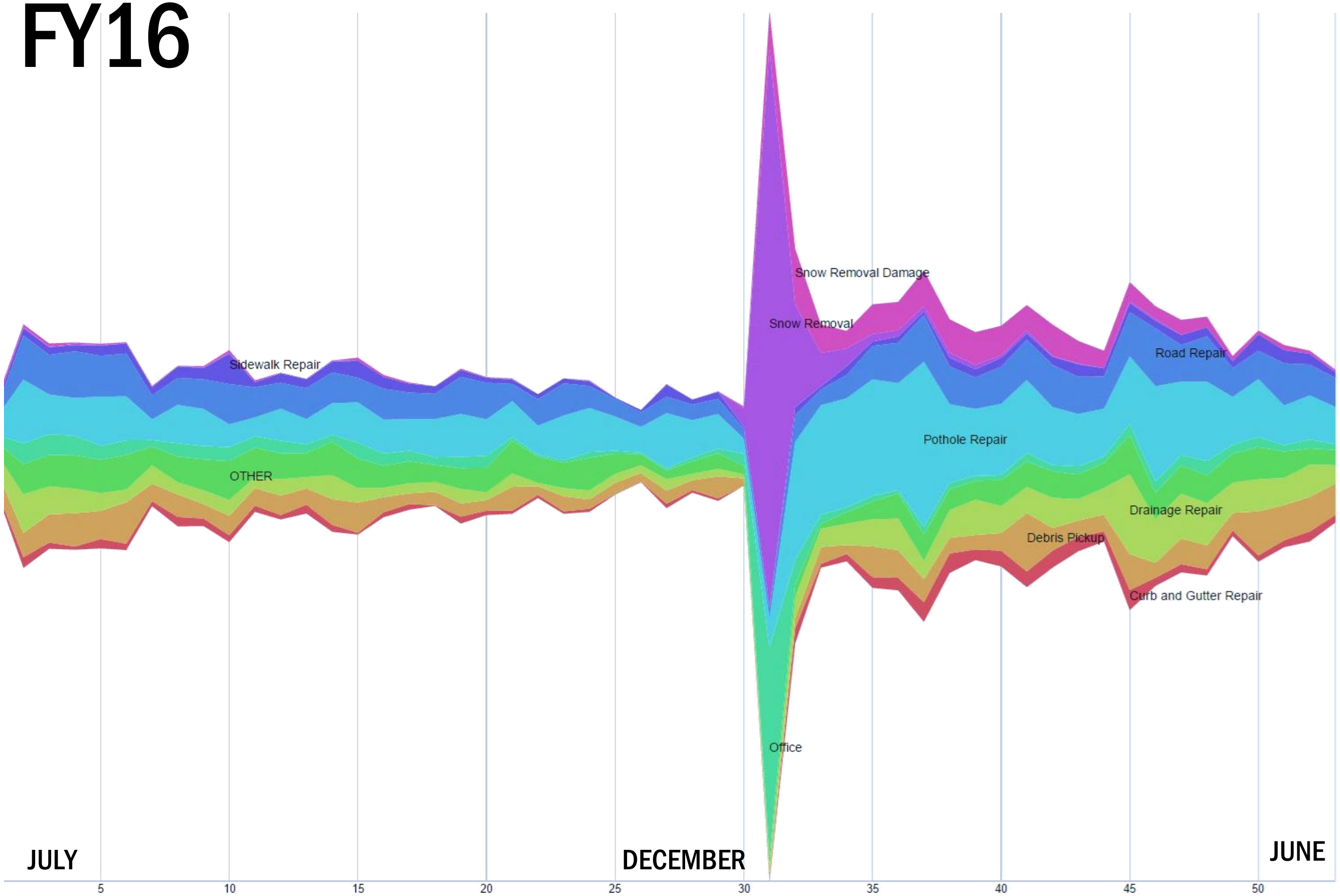
Animal Services	`#8869bf`
Building Construction	`#bf6969`
Code Enforcement	`#69bfa7`
Highway Services	`#b7bf69`
Landlord Tenant Affairs	`#6979bf`
OTHER	`#bf6998`
Solid Waste	`#69bf79`
Traffic	`#b769bf`
Transit	`#69a7bf`
Treasury	`#bf9869`
Tree Maintenance	`#88bf69`

Source / notes

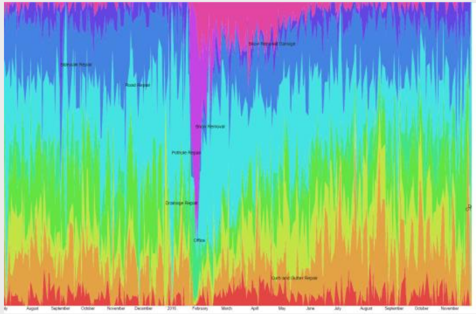
MC311 Siebel CRM

Highway Services: 311 Fulfillment Service Request Volume

FY16



This slide shows the same type of visualization for highway services. Note the enormous spike in January as a result of Snowzilla.



Source / notes

MC311 SR open data set

APPENDIX B: 311 GEOGRAPHY

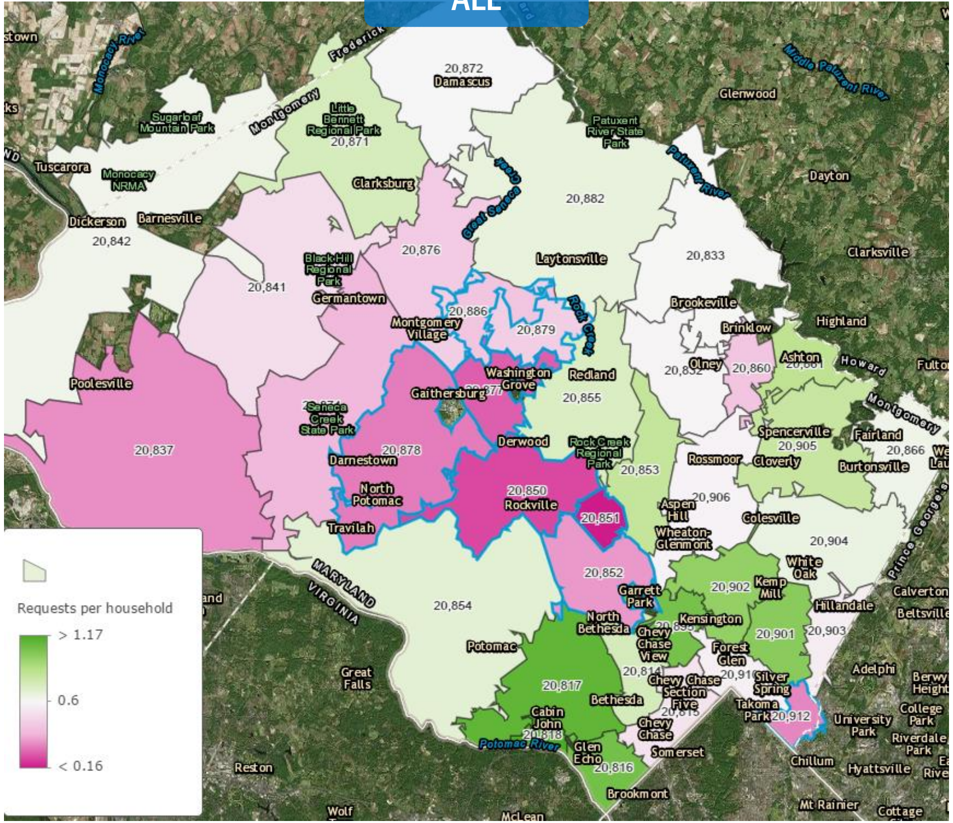
TO BE EXPANDED IN FY17 REVIEW

PILOT GEOSPATIAL ANALYSIS

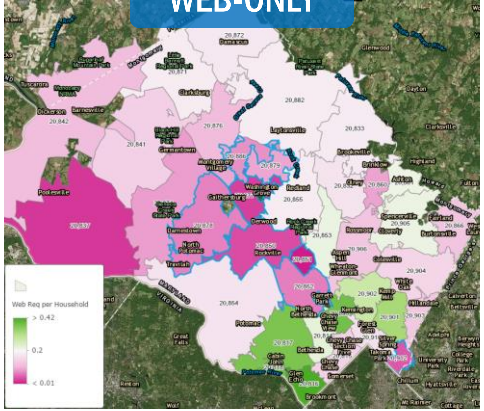
311 Requests per Household

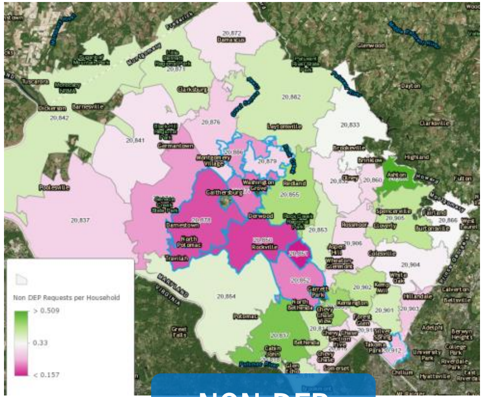
CountyStat
Performance Measurement and Management

ALL


20,872
Damascus
Frederick
Montgomery
Little Bennett Regional Park
20,871
Sugarloaf Mountain Park
Tuscarora
Monocacy NRMA
Dickerson
Barnesville
20,842
Clarksburg
20,882
Glenwood
Patuxent River State Park
Dayton
Middle Patuxent River
Patuxent River
Great Seneca Creek
20,876
Black Hill Regional Park
Germantown
20,841
Laytonsville
20,833
Clarksville
Brookeville
Brinklow
Highland
Montgomery Village
20,886
20,879
Rock Creek
Olney
20,832
20,860
Ashton
20,861
Howard
Fulton
Poolesville
Washington Grove
20,877
Gaithersburg
Redland
20,855
Seneca Creek State Park
Spencerville
20,905
Fairland
20,866
20,837
Darnestown
20,878
Derwood
Rock Creek Regional Park
20,853
Rossmoor
Cloverly
Burtonsville
North Potomac
20,850
Rockville
Aspen Hill
20,906
Colesville
20,851
Travilah
Wheaton-Glenmont
20,904
Prince George's
White Oak
Calverton
Beltsville
Maryland
Virginia
20,852
Garrett Park
20,902
Kemp Mill
Hillandale
20,854
North Bethesda
Chevy Chase View
Kensington
20,901
20,903
Potomac
20,895
Forest Glen
Adelphi
Great Falls
20,817
20,814
Chevy Chase Section Five
20,910
Silver Spring
Berwyn Heights
Bethesda
Cabin John
20,815
Takoma Park
20,912
University Park
College Park
20,818
Chevy Chase
Riverdale Park
Potomac River
Glen Echo
Somerset
20,816
Chillum
Hyattsville
Reston
Brookmont
Mt Rainier
Cottage
Wolf
McLean
Requests per household
> 1.17
0.6
< 0.16

WEB-ONLY


Web Req per Household
> 0.42
0.2
< 0.01


Non DEP Requests per Household
> 0.509
0.33
< 0.157

NON-DEP

Note that only about 40% of service requests have an attached zip code. CountyStat used this subset to identify usage per zip code, normalized by the number of households. Zipcodes containing a municipality are outlined in blue.

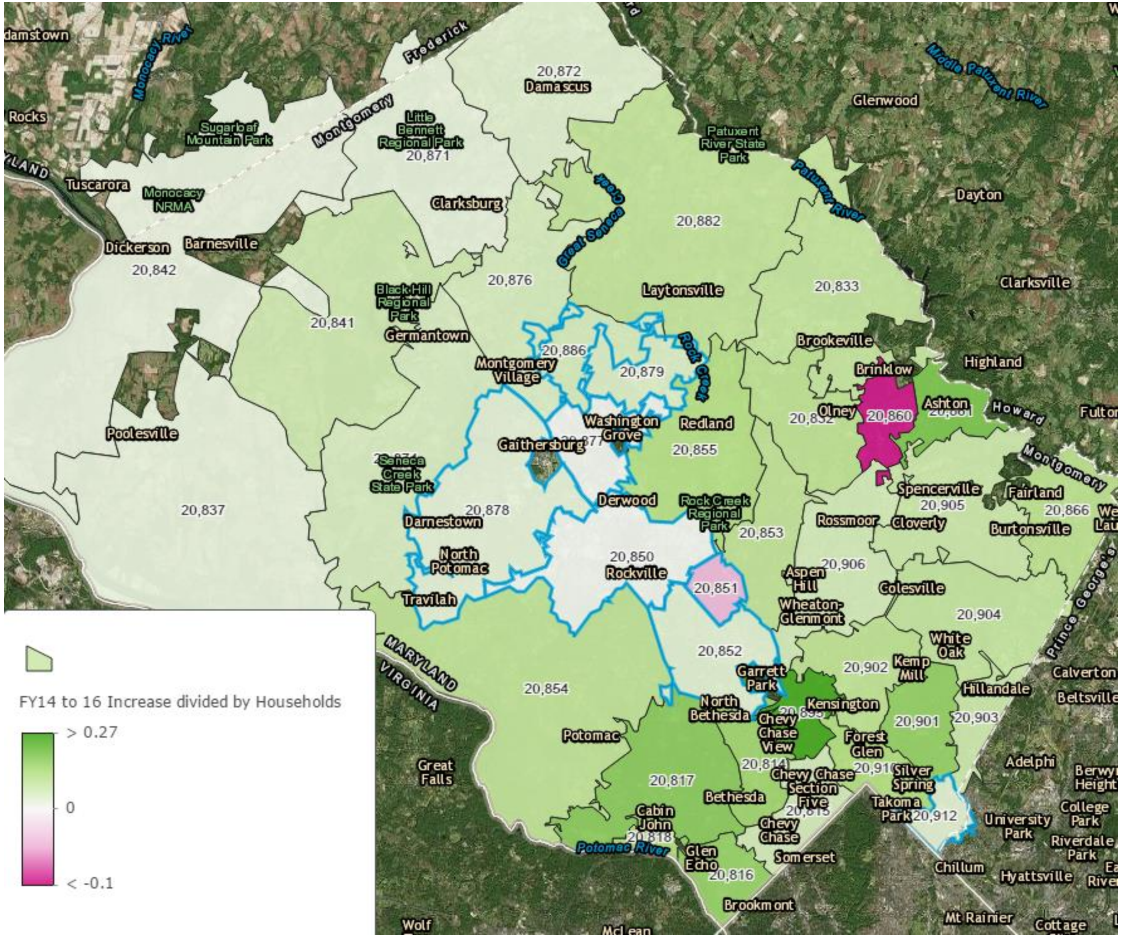
Note that web-only requests per households and non-DEP requests per households do not differ much from the overall number of requests per households.

Usage by zipcode has a relatively strong correlation (+50%) with median income, median age, and not overlapping with a municipality.

Source / notes

MC311 Open Data Set

Increase in MC311 requests per households: FY14 vs. FY16

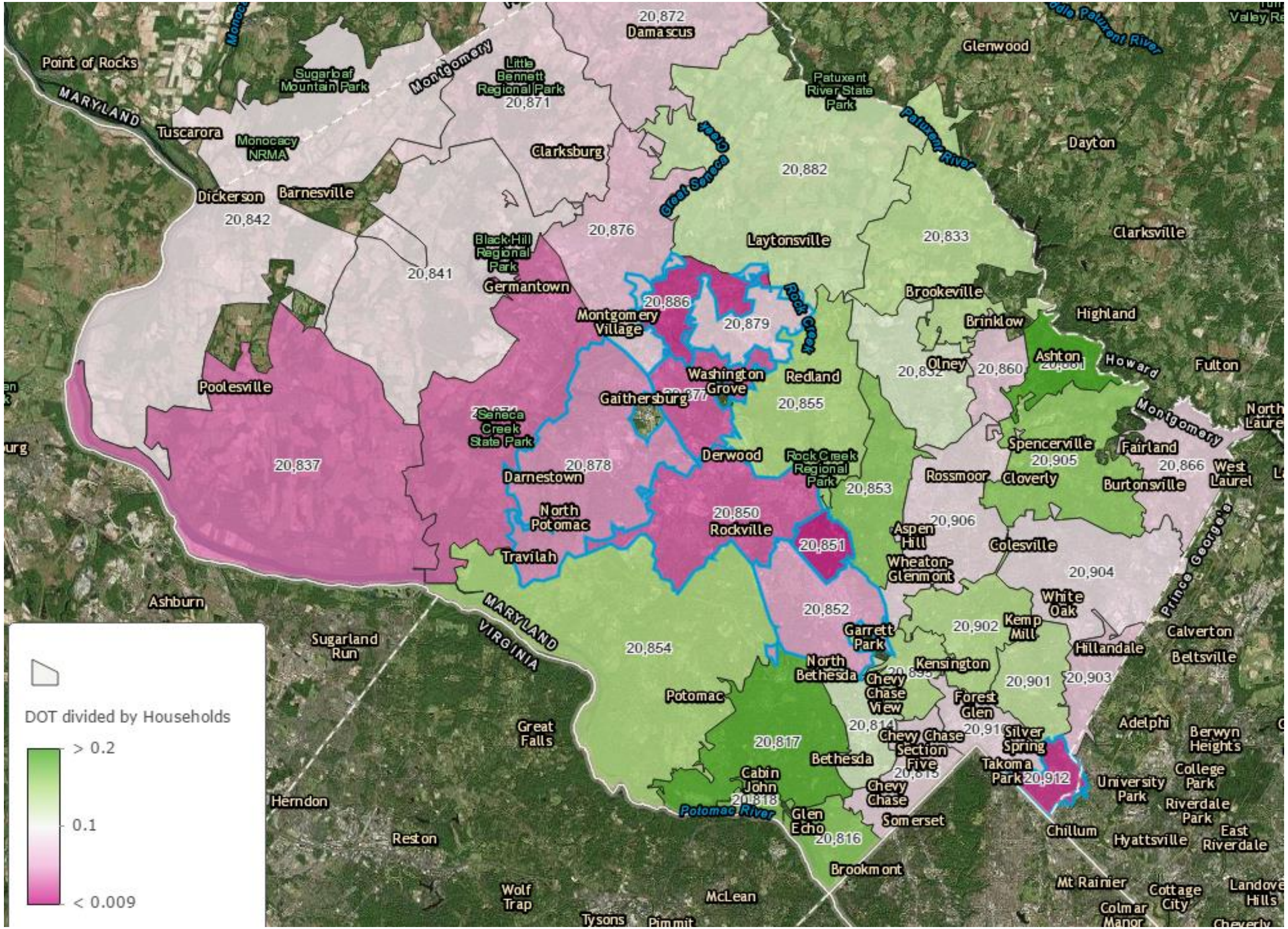

FY14 to 16 Increase divided by Households
> 0.27
0
< -0.1
20,872
Damascus
20,871
Little Bennett Regional Park
Clarksburg
20,842
Dickerson
Barnesville
20,841
20,876
Germantown
20,882
Laytonsville
20,833
Brookeville
Brinklow
Olney
20,832
20,860
Ashton
20,886
20,879
Montgomery Village
Washington Grove
Redland
20,855
Gaithersburg
20,877
Derwood
Rock Creek Regional Park
20,853
20,837
Poolesville
20,878
Darnestown
North Potomac
Travilah
20,850
Rockville
20,851
Aspen Hill
20,906
Wheaton-Glenmont
Colesville
20,904
Spencerville
20,905
Cloverly
Rossmoor
Fairland
20,866
Burtonsville
20,852
Garrett Park
20,854
Potomac
North Bethesda
Kensington
20,895
Chevy Chase View
20,902
Kemp Mill
White Oak
Hillandale
20,901
20,903
Forest Glen
20,910
Silver Spring
Takoma Park
20,912
20,814
20,817
Bethesda
Chevy Chase Section Five
20,815
Chevy Chase
Cabin John
20,818
Glen Echo
20,816
Somerset
Brookmont
Great Falls
Potomac River
Sugarloaf Mountain Park
Monocacy NRMA
Tuscarora
Rocks
Seneca Creek State Park
Black Hill Regional Park
Patuxent River State Park
Great Seneca Creek
Rock Creek
Patuxent River
Middle Patuxent River
Glenwood
Dayton
Clarksville
Highland
Fulton
Howard
Montgomery
Frederick
Prince George's
MARYLAND
VIRGINIA
Calverton
Beltsville
Adelphi
University Park
College Park
Riverdale Park
Hyattsville
Chillum
Mt Rainier
Cottage
Wolf
McLean

MC311 utilization appears to be on the rise across the County. The growth is slightly higher in zipcodes that are already heavy users. The weakest growth is primarily in the zipcodes that overlap with municipalities and the low-density zipcodes in up-county.

Source / notes

MC311 Open Data Set

Volume by Department: DOT

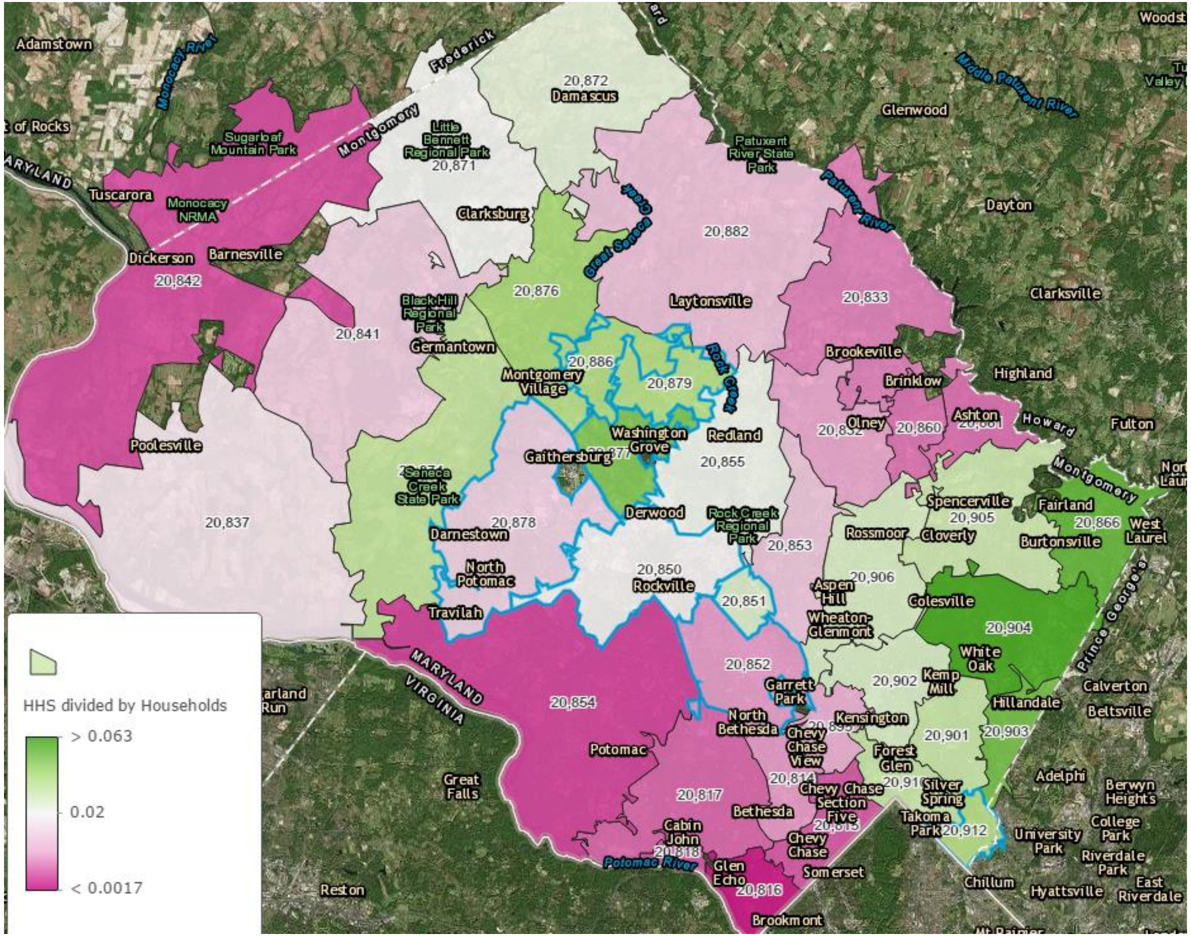

DOT divided by Households
> 0.2
0.1
< 0.009
20,872
Damascus
Point of Rocks
Sugarloaf Mountain Park
Little Bennett Regional Park
20,871
Glenwood
Patuxent River State Park
Tuscarora
Monocacy NRMA
Clarksburg
Dayton
20,882
Dickerson
Barnesville
20,842
20,876
Laytonsville
20,833
Clarksville
20,841
Black Hill Regional Park
Germantown
20,886
Montgomery Village
20,879
Brookeville
Brinklow
Highland
Ashton
20,861
Olney
20,832
20,860
Fulton
Poolesville
Washington Grove
Redland
Gaithersburg
20,877
20,855
Seneca Creek State Park
20,874
Spencerville
20,905
Fairland
20,866
West Laurel
Burtonsville
20,837
20,878
Darnestown
Derwood
Rock Creek Regional Park
20,853
Rossmoor
Cloverly
North Potomac
20,850
Rockville
20,906
Aspen Hill
Colesville
20,851
Travilah
Wheaton-Glenmont
20,904
Ashburn
20,852
White Oak
Calverton
Sugarland Run
20,854
Garrett Park
20,902
Kemp Mill
Hillandale
Beltsville
North Bethesda
Kensington
Potomac
Chevy Chase View
20,895
Forest Glen
20,901
20,903
Great Falls
20,817
20,814
Chevy Chase Section Five
20,910
Silver Spring
Adelphi
Berwyn Heights
Bethesda
20,815
Takoma Park
20,912
College Park
Cabin John
20,818
Chevy Chase
University Park
Riverdale Park
Herndon
Glen Echo
Somerset
Chillum
Hyattsville
East Riverdale
Reston
20,816
Brookmont
Mt Rainier
Cottage City
Landover Hills
Wolf Trap
McLean
Colmar Manor
Tysons
Pimmit
Cheverly
MARYLAND
VIRGINIA
Potomac River
Great Seneca Creek
Rock Creek
Patuxent River
Middle Patuxent River
Howard
Montgomery
Prince George's

In comparison to overall volume, the north-east of the County is a relatively high user of DOT services.

Source / notes

MC311 Open Data Set

Volume by Department: HHS

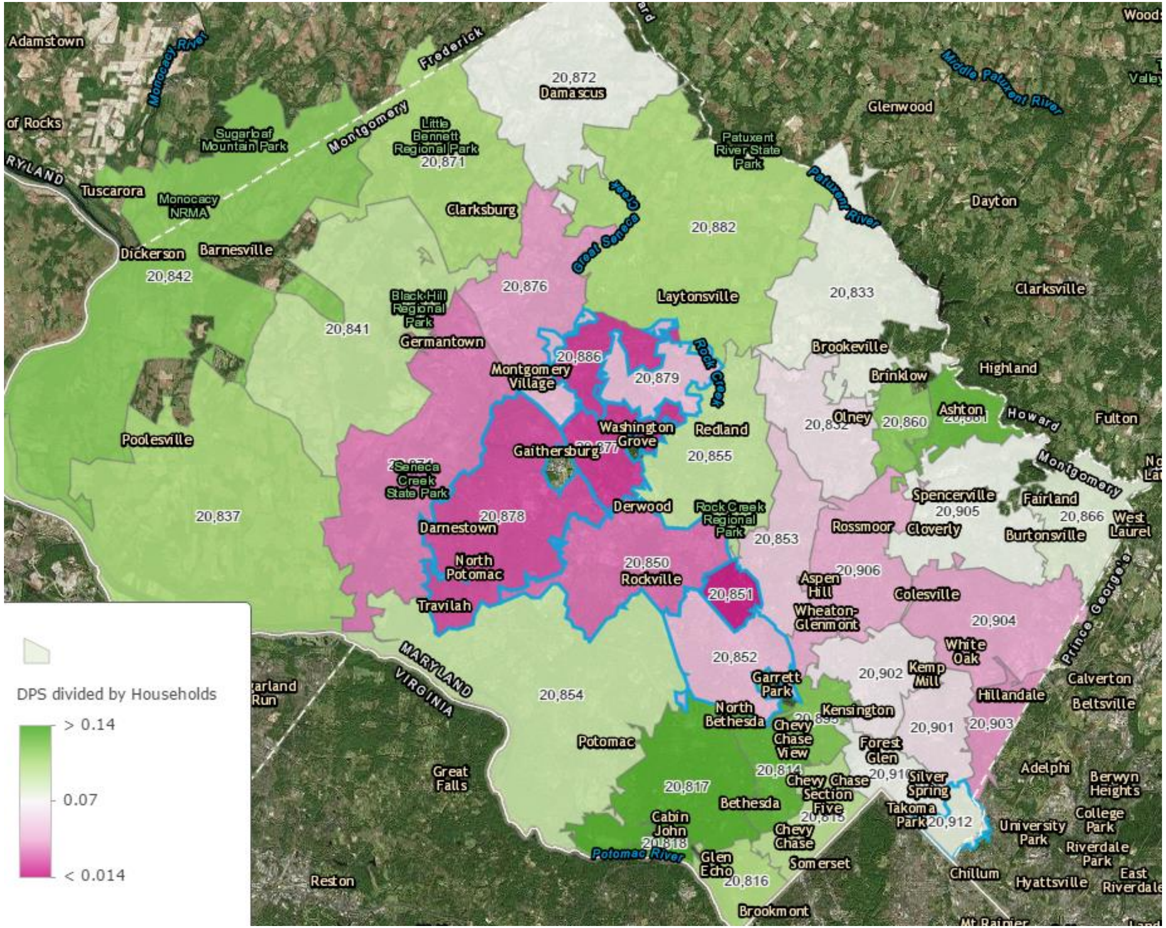

HHS divided by Households
> 0.063
0.02
< 0.0017
20,872
Damascus
20,871
Clarksburg
20,882
Laytonsville
20,833
Brookeville
20,842
Dickerson
Barnesville
20,841
Germantown
20,876
20,886
Montgomery Village
20,879
Washington Grove
Redland
20,855
Gaithersburg
20,877
Olney
20,832
20,860
Ashton
20,861
20,837
Poolesville
20,878
Darnestown
North Potomac
Travilah
20,850
Rockville
20,851
20,853
Derwood
20,906
Aspen Hill
Wheaton-Glenmont
20,905
Spencerville
Cloverly
20,866
Fairland
Burtonsville
Colesville
20,904
White Oak
20,902
Kemp Mill
20,852
Garrett Park
North Bethesda
Kensington
20,895
20,901
20,903
Forest Glen
20,910
Silver Spring
20,854
Potomac
20,817
Bethesda
20,814
20,815
Chevy Chase
20,818
Cabin John
Glen Echo
20,816
Takoma Park
20,912
Great Falls
Reston
Rossmoor
Tuscarora
Sugarloaf Mountain Park
Monocacy NRMA
Adamstown
Glenwood
Dayton
Clarksville
Highland
Fulton
Calverton
Beltsville
Hillandale
Adelphi
Chillum
Hyattsville
Brookmont
Somerset

The usage patterns for HHS service requests is the most distinct, and is concentrated in the otherwise low-use zipcodes in East County and in the vicinity of Gaithersburg.

Source / notes

MC311 Open Data Set

Volume by Department: DPS

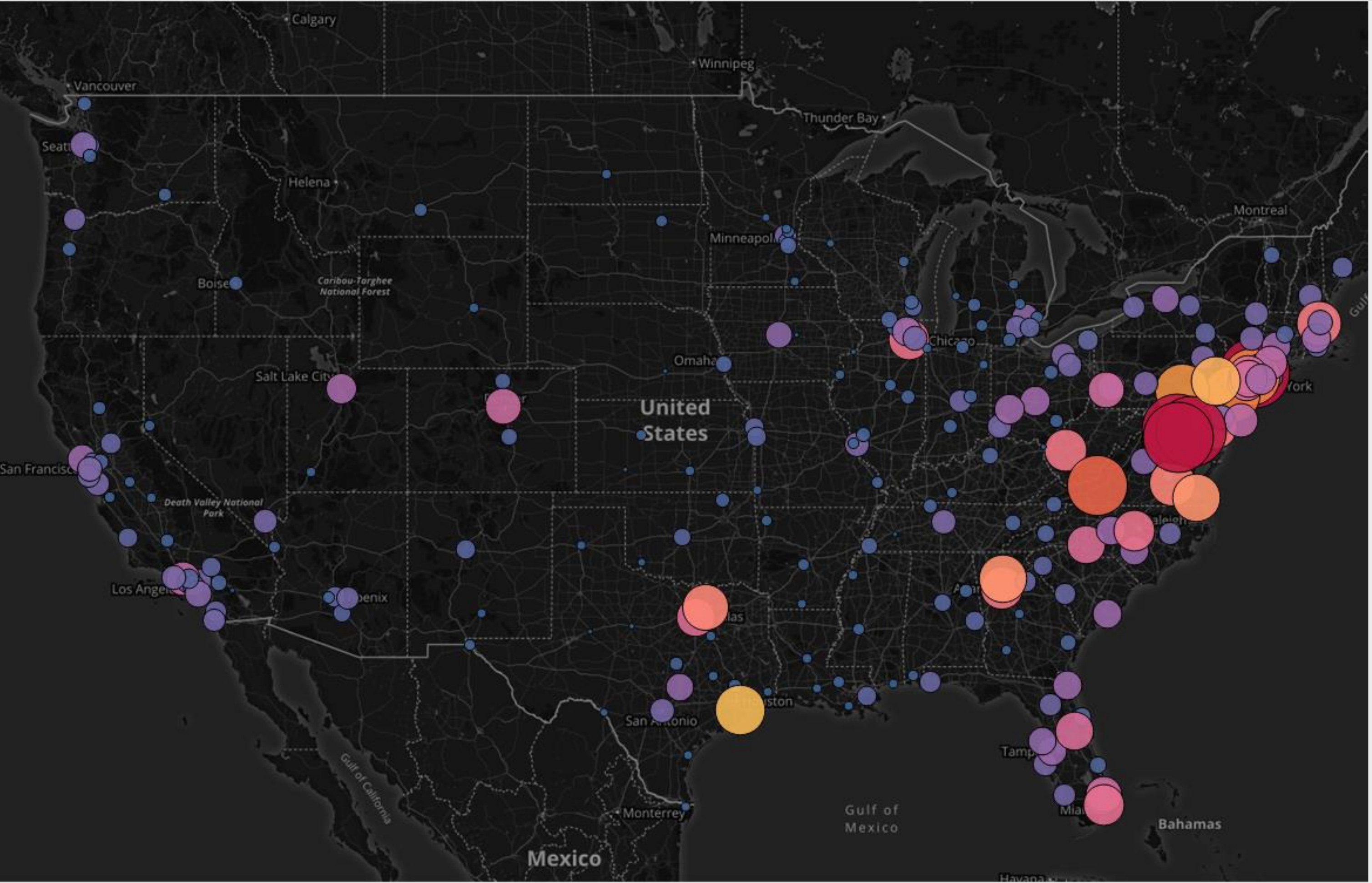

Adamstown
Monocacy River
Frederick
Montgomery
20,872
Damascus
Glenwood
Middle Patuxent River
Woodbine
Valley
of Rocks
Sugarloaf Mountain Park
Little Bennett Regional Park
20,871
Patuxent River State Park
MARYLAND
Tuscarora
Monocacy NRMA
Clarksburg
Great Seneca Creek
Patuxent River
Dayton
20,882
Dickerson
Barnesville
20,842
20,876
Black Hill Regional Park
Laytonsville
20,833
Clarksville
20,841
Germantown
Rock Creek
Brookeville
20,886
Montgomery Village
20,879
Brinklow
Highland
Olney
20,832
20,860
Ashton
20,861
Howard
Fulton
Poolesville
Washington Grove
Redland
20,877
Gaithersburg
20,855
Seneca Creek State Park
20,874
Montgomery
Spencerville
20,905
Fairland
20,866
West Laurel
20,837
Derwood
Rock Creek Regional Park
20,853
Rossmoor
Cloverly
Burtonsville
20,878
Darnestown
North Potomac
20,850
Rockville
20,906
Aspen Hill
Colesville
Prince George's
20,851
Wheaton-Glenmont
20,904
Travilah
White Oak
20,852
Garrett Park
20,902
Kemp Mill
Calverton
MARYLAND
VIRGINIA
20,854
North Bethesda
Kensington
Hillandale
Beltsville
Garland Run
20,895
Chevy Chase View
20,901
20,903
Potomac
Forest Glen
Great Falls
20,814
20,910
Silver Spring
Adelphi
Berwyn Heights
20,817
Chevy Chase Section Five
Bethesda
20,815
Takoma Park
20,912
College Park
Cabin John
20,818
Chevy Chase
University Park
Riverdale Park
Potomac River
Glen Echo
Somerset
Reston
20,816
Chillum
Hyattsville
East Riverdale
Brookmont
Mt Rainier
DPS divided by Households
> 0.14
0.07
< 0.014

The usage patterns for DPS service requests are also relatively unusual, with high activity in the up-County region around Gaithersburg and Clarksburg.

Source / notes

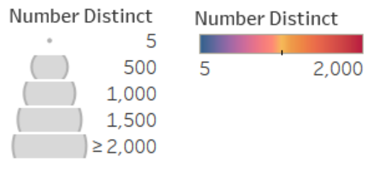
MC311 Open Data Set

Experimental: Area Code Analysis


Calgary
Winnipeg
Vancouver
Seattle
Thunder Bay
Helena
Montreal
Minneapolis
Boise
Caribou-Targhee National Forest
Chicago
Omaha
Salt Lake City
United States
York
San Francisco
Death Valley National Park
Raleigh
Los Angeles
Phoenix
Dallas
Houston
San Antonio
Tampa
Miami
Gulf of California
Monterrey
Gulf of Mexico
Bahamas
Mexico
Havana

This map shows the volume of calls received by area code using the city associated with that area code (2013-2016).

This is a proxy for tracking domestic migration (in that many residents do not bother to obtain a new local number for their cell phones).



Source / notes

MC311 Siebel CRM data